MINISTRY OF HEALTH OF UKRAINE
ODESA NATIONAL MEDICAL UNIVERSITY
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

CONFIRMED by
Vice-rector for scientific and pedagogical work
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«29» August, 2024

THE METHODICAL RECOMMENDATIONS FOR PRACTICAL CLASS

Interrnational Faculty, Course VI

Discipline "Obstetrics and Gynecology"

Practical lesson №37. Topic: Surgical interventions in obstetrics. Postpartum septic diseases.

Approved:

Meeting of the Department of Obstetrics and Gynecology of Odesa National Medical University

Protocol No. 1 dated August 29, 2024.

Head of the Department, Doctor of Medicine, Professor _____ (I.Z. Gladchuk)

Developer:
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PRACTICAL LESSON № 37.

OPERATIVE OBSTETRICS. POSTNATAL SEPTIC DISEASES.

LEARNING OBJECTIVE is to gain basic knowledge about physiological changes in postpartum period, physiology of lactation and breastfeeding, primary care of newborn in order to make recommendations for management of puerperium and neonatal period and advice woman on discharge.

BASIC CONCEPTS:

- duration and main events of postpartum period,
- involution of uterus and other pelvic structures, general physiological changes in female body in puerperium,
- physiology of lactation, composition of colostrum and milk,
- ten steps for successful breastfeeding,
- the main principles of management of normal puerperium,
- checkup and advise on discharge,
- postpartum contraception,
- apgar rating and immediate care of newborn,
- principles of prevention of purulent – septic complications in obstetric hospital,
- risk factors for developing septic – infectious complications in the mother and newborn,
- classification of postparton complications,
- a modern look at the development of systemic inflammatory response syndrome,
- the volume of conservative treatment and surgery in case of postparton infectious complications in relation to various clinical forms,
- indications and principles of intensive care.

EQUIPMENT

– Multimedia equipment (computer, projector, screen), TV.

– Obstetric models and obstetric instruments.

– Professional algorithms, structural-logical schemes, tables, videos.

– Results of laboratory and instrumental researches, situational tasks, patients, medical histories.

EDUCATIONAL TIME – 4 h

I. ORGANIZATIONAL STAGE

– Greetings,

– checking attendees,

– defining of educational goals,

– providing of positive motivation.

One of the important causes of lethality in obstetrics and gynecology is common forms of postpartum infection. Timely diagnosis and scientifically sound treatment belongs to the most important problems of obstetrics and gynecology. About 80% of the lethal consequences of common forms of postpartum infection in obstetric and gynecological hospitals are caused by late diagnosis, late surgery, incomplete surgical care and intensive care.

This topic requires thorough study both to prevent complications of pregnancy, childbirth and postpartum stage, and for therapeutic measures.

CONTROL OF BASIC KNOWLEDGE (written work, written testing, online testing, face-to-face interview, etc.)

2.1. Requirements for the theoretical readiness of students to perform practical classes.

Knowledge requirements:

– Communication and clinical examination skills.

– Ability to determine the list of required clinical, laboratory and instrumental studies and evaluate their results.

– Ability to make a preliminary and clinical diagnosis of the disease

– Ability to perform medical manipulations

– Ability to determine the tactics of physiological pregnancy, physiological labor and the postpartum period.

– Ability to keep medical records.

List of didactic units:

– Pelvis from anatomical and obstetric points of view.

– The dimensions of the fetal head and body.

– Signs of fetal maturity.

2.2. Questions (test tasks, tasks, clinical situations) to test basic knowledge on the topic of the class.

Questions:

• to take a medical history (general and specific) and record information in a standardized proforma,

• to perform general examination, assess the health status of the puerpera,

• to assess uterine involution, character of lochia, lab tests,

• to counsel the women about physiological changes in postpartum period,

• to assess complaints of puerpera, explain the origins of minor ailments in postpartum period, give advice how to reduce the problem,

• to develop a plan of management of normal postpartum period,

• to understand the common disorders of the puerperium and how to manage them

• to be able to recognize and manage common postpartum psychiatric disorders,

• to counsel woman about physiology of lactation, benefits of breastfeeding,

• to check up woman on discharge, give judicious advice regarding diet, drugs and hygiene,

• to provide counseling about postpartum contraception,

• to rate a newborn according Apgar scale, to perform immediate care of newborn

• evaluate clinical signs of postpartum infection.

• interpret the results of laboratory tests.

- iraw up a plan for comprehensive treatment and change it due to inadequacy, or vice versa, with signs of improvement of the condition.
- evaluate the indications for surgery.
- write prescriptions for the treatment of the patient.

Test tasks

Direction: For each of the multiple-choice questions select the lettered answer that is the one best response in each case.

1. The posterior rectus fascia (sheath) ends at the

(A) insertion of the rectus muscles

(B) insertion of the anterior rectus sheath

(C) arcuate line (semicircular line, linea semicircularis, line of Douglas)

(D) area approximately 3-4 cm below the umbilicus

(E) area approximately 2-3 cm above the pubic symphysis

2. Sacrospinous ligament

(A) a thick band of fibers filling the angle created by the pubic rami

(B) passes from the anterior superior iliac spine to the pubic tubercle

(C) triangular and extends from the lateral border of the sacrum to the ischial spine

(D) attaches to the crest of the ilium and the posterior iliac spines superiorly with an inferior attachment to the ischial tuberosity

(E) passes over the anterior surface of the sacrum

3. Sacrotuberous ligament

(A) a thick band of fibers filling the angle created by the pubic rami

(B) passes from the anterior superior iliac spine to the pubic tubercle

(C) triangular and extends from the lateral border of the sacrum to the ischial spine

(D) attaches to the crest of the ilium and the posterior iliac spines superiorly with an inferior attachment to the ischial tuberosity

(E) passes over the anterior surface of the sacrum

4. Ilioinguinal ligament

(A) a thick band of fibers filling the angle created by the pubic rami

(B) passes from the anterior superior iliac spine to the pubic tubercle

(C) triangular and extends from the lateral border of the sacrum to the ischial spine

(D) attaches to the crest of the ilium and the posterior iliac spines superiorly with an inferior attachment to the ischial tuberosity

(E) passes over the anterior surface of the sacrum

5. Arcuate ligament

(A) a thick band of fibers filling the angle created by the pubic rami

(B) passes from the anterior superior iliac spine to the pubic tubercle

(C) triangular and extends from the lateral border of the sacrum to the ischial spine

(D) attaches to the crest of the ilium and the posterior iliac spines superiorly with an inferior attachment to the ischial tuberosity

(E) passes over the anterior surface of the sacrum

6. Formed by the superior and inferior pubic rami and covered by a central membrane through which a nerve, artery, and vein pass

(A) obturator foramen

(B) greater sciatic foramen

(C) lesser sciatic foramen

(D) sacrospinous ligament

(E) sacral foramina

7. The internal pudendal vessels and pudendal nerve exit the pelvis but then reenter through this structure

(A) obturator foramen

(B) greater sciatic foramen

(C) lesser sciatic foramen

(D) sacrospinous ligament

(E) sacral foramina

8. Divides and demarcates the greater and lesser sciatic foramen

(A) obturator foramen

(B) greater sciatic foramen

(C) lesser sciatic foramen

(D) sacrospinous ligament

(E) sacral foramina

9. The piriformis muscle, gluteal vessels, and posterior femoral cutaneous nerves pass through this structure

(A) obturator foramen

(B) greater sciatic foramen

(C) lesser sciatic foramen

(D) sacrospinous ligament

(E) sacral foramina

10. Four anterior and four posterior openings through which pass small nerves

(A) obturator foramen

(B) greater sciatic foramen

(C) lesser sciatic foramen

(D) sacrospinous ligament

(E) sacral foramina

11. Which of the following statements is FALSE?

(A) The ischium has a body and two rami

(B) The internal surface of the body of the ischium provides attachments for the levator ani muscle and coccygeus muscle

(C) The superior ramus is located cephalad to the inferior ramus in the standing position

(D) The superior ramus forms the dorsolateral portion of the obturator canal

(E) The ischial tuberosity is the lowest portion of the pelvis in the erect or sitting posture and bears the weight of the human frame in the sitting position

12. Regarding the pubis, which of the following statements is FALSE?

(A) The pubis has a body and two rami

(B) The superior edge of the body of the pubis, lateral to the midline, has a raised area called the anterior iliac crest a common landmark

(C) The inferior ramus is the attachment of the adductor magnus and brevis, and obturator internus muscles

(D) The inferior rami form the lower portion of the pubic arch

(E) Inferiorly, the pubic bone is the attachment for the urogenital diaphragm

13. The sacrum

(A) is formed from 11 or 12 small fused vertebrae

(B) has an uppermost anterior portion called the obstetrical conjugate

(C) in women has a concave pelvic surface

(D) is separated from the vertebrae that make up the coccyx by the sacrococcygeal joint

(E) most often is the limiting factor in determining the size of the pelvic outlet

14. Which of the following is a muscle of the external genitalia?

(A) the gluteus

(B) the sartorius

(C) the superficial transverse perineal

(D) the deep transverse perineal

(E) the levator ani

15. The term pudenda includes the

(A) mons pubis

(B) vulva

(C) labia

(D) external genitalia

(E) all the above

16.The term perineum describes

(A) the entire area between the thighs from the symphysis to the coccyx, bounded inferiorly by the skin and superiorly by the levator muscles of the pelvic diaphragm

(B) the anus and perianal area

(C) the superficial skin layer of the vulva

(D) the tendon joining the muscles deep to the external genitalia

(E) bulbocavernosus, ischiocavernosus, and transverse perineal muscles as a complex

17. The clitoris

(A) consists of a single crurum, a short body, and the glans clitoris, with overlying skin called the prepuce

(B) is attached to the pubic bone by a suspensory ligament

(C) contains within the shaft the corpora cavernosa, a collection of dense connective tissue that serves as support for the anterior-inferior portion of the vagina

(D) is supplied very sparsely with nerves originating primarily from the terminal branch of the ilioinguinal nerve in most women

(E) plays a secondary role in erotic stimulation in most women when compared to the role of the vagina

18. Which of the following statements regarding the muscles of the external genitalia is TRUE?

(A) The bulbocavernosus muscle surrounds the distal vagina and vestibule on each side as a single continuous strip of muscle, much like other sphincters

(B) The ischiocavernosus muscle takes origin from the ischial tuberosity and inferior ischial ramus and inserts upon the inferior pubic ramus on each side of the pelvis

(C) The superficial transverse perineal muscle arises from the ischial tuberosity and inferior ischial ramus and inserts between the posterior vagina and anterior rectum

(D) The perineal body serves as a central connection for all the superficial muscles of the external genitalia except the transverse perineal muscle which inserts directly on the external anal sphincter

(E) The muscles of the external genitalia are usually spared at the time of episiotomy when the levator ani muscle is routinely divided

19. Which of the following statements about the vagina is FALSE?

(A) The vagina is a 7-10 cm canal connecting the internal and external genitalia from the vestibule to the uterine cervix

(B) It is a hollow, distensible, fibromuscular tube with the apex (vault) having an H-shaped lumen and the external opening being flattened in the dorsal-ventral dimension

(C) The body of the vaginal tube is flattened in its normal resting state

(D) The mid-portion of the vaginal axis is nearly perpendicular to the lower sacrum in the adult human female in a standing position

(E) The posterior fornix (back wall of the vagina) is approximately 2 cm longer than the front wall and is directly connected to the peritoneal pouch (posterior cul de sac, retrouterine space, or pouch of Douglas) directly behind the uterus

20. When the infantile uterus is examined, one finds that

(A) the cervix is larger than the corpus (body of the uterus)

(B) the position is always anteflexed

(C) the cervix is the same size as the corpus

(D) the body is larger than the cervix

(E) it is as large as the adult organ in the immediate newborn period

21. The portio vaginalis of the cervix is that part which

(A) extends cephalad from the vagina

(B) protrudes into the vagina

(C) forms an internal isthmus

(D) is normally covered with endocervical epithelium

(E) all the above

22. Which of the following statements regarding the uterus is FALSE?

(A) The uterus has a body (corpus), composed mainly of smooth muscle, and a cervix, composed mainly of connective and elastic tissues, that are joined by a transitional portion (isthmus)

(B) It is an estrogen-dependent organ measuring about 7.5 cm long by 5 cm in width, and 4 cm anterior to posterior diameter in an adult female

(C) After puberty the uterus weighs about 50 grams in the nullipara and 70 grams in the multipara

(D) It lies between the bladder anteriorly and the pouch of Douglas in front of the rectum posteriorly, with the cervical portion extending into the abdomen and into the vagina

(E) The opening at the distal tip of the cervix is called the internal os

23. The uterus and adnexa are normally mobile structures, but they do have some relatively fixed anatomic characteristics. Which, if any, of the following statements about their relationship and/or positions is FALSE?

(A) Anteflexion means that the uterus is bent forward on itself

(B) The ovaries can be normally found caudad to the cervix

(C) The round ligaments are normally attached to the uterus anterior to the insertion of the fallopian tubes

(D) Adnexa refers to the tube, ovary, and their connecting structures

(E) All statements are true

24. Regarding the anatomy of the fallopian tube, which of the following statements is FALSE?

(A) Fallopian tubes are a conduit from the peritoneal to the uterine cavity

(B) Each fallopian tube traverses the superior portion of the broad ligament attached by a mesentery (mesosalpinx)

(C) The fallopian tube has four distinct areas in its 8-12 cm length: the portion that runs through the uterine wall (interstitial or cornual portion), the part immediately adjacent to the uterus (isthmic portion), the mid-portion of the tube (ampulla), and the distal portion containing the finger-like fimbria that expels the ovum (infundibular portion) to begin its passage toward the ovary

(D) The longest of the fimbriae (fimbria ovarica) is attached to the ovary

(E) Each tube is covered by peritoneum and consists of three layers: serosa, muscularis, and a nonciliated mucosa

25. Which of the following statements about the ovary is FALSE?

(A) The ovaries normally change in size through-out a woman's lifetime

(B) The ovary is supported in its normal anatomic position by the infundibulopelvic ligament and the ovarian ligament

(C) The ovary produces both hormones and germ cells

(D) The ovary lies in the ovarian fossa of the true pelvis, overlying the iliac vessels

(E) The ovary produces the estrogens and androgens that regulate sexual desire in the human female

II. FORMATION OF PROFESSIONAL SKILLS (mastering skills, conducting curation, determining the treatment regimen, conducting a laboratory study, etc.).

3.1. Content of tasks (tasks, clinical situations, etc.).

Interactive task:

Students of the group are divided into 3 subgroups of 3-4 people each. They work in the classroom, reception department of the maternity hospital, labor & delivery ward, neonatal department with pregnants and newborns.

Tasks:

– Subgroup I – play situational tasks as patients

– Subgroup II - play situational tasks as doctors

– Subgroup III – to assess answers of subgroups I and II and makes adjustments.

Tests:

Direction: For each of the multiple- choice questions select the lettered answer that is the one best response in each case.

1. A woman consulted a doctor on the 14th day after labour about sudden pain, hyperemy and induration of the left mammary gland, body temperature rise up to 39oC, headache, indisposition. Objectively: fissure of nipple, enlargement of the left mammary gland, pain on palpation. What pathology would you think about in this case?

A. Lactational mastitis

B. Lacteal cyst with suppuration

C. Fibrous adenoma of the left mammary gland

D. Breast cancer

E. Phlegmon of mammary gland

2. On the tenth day after discharge from the maternity house a 2-year-old patient consulted a doctor about body temperature rise up to 39oC, pain in the right breast. Objectively: the mammary gland is enlarged, there is a hyperemized area in the upper external quadrant, in the same place there is an ill-defined induration, lactostasis, fluctuation is absent. Lymph nodes of the right axillary region are enlarged and painful. What is the most likely diagnosis?

A. Lactational mastitis

B. Abscess

C. Erysipelas

D. Dermatitis

E. Tumour

3. Examination of placenta revealed a defect. An obstetrician performed manual investigation of uterine cavity, uterine massage. Prophylaxis of endometritis in the postpartum period should involve following actions:

A. Antibacterial therapy

B. Instrumental revision of uterine cavity

C. Haemostatic therapy

D. Contracting agents

E. Intrauterine instillation of dioxine

4. On the 10th day postpartum a puerperant woman complains of pain and heaviness in the left mammary gland. Body temperature is 38, 8oC, Ps- 94 bpm. The left mammary gland is edematic, the supero-external quadrant of skin is hyperemic. Fluctuation symptom is absent. The nipples discharge drops of milk when pressed. What is a doctor's further tactics?

A. Antibiotic therapy, immobilization and expression of breast milk

B. Compress to both mammary glands

C. Inhibition of lactation

D. Physiotherapy

E. Opening of the abscess and drainage of the mammary gland

5. A parturient woman is 27 year old, it was her second labour, delivery was at full-term, normal course. On the 3rd day of postpartum period body temperature is 36, 8oC, heart rate - 72/min, BP - 120/80 mm Hg. Mammary glands are moderately swollen, nipples are clean. Abdomen is soft and painless. Fundus of uterus is 3 fingers below the umbilicus. Lochia are bloody, moderate. What is the most probable diagnosis?

A. Physiological course of postpartum period

B. Subinvolution of uterus

C. Postpartum metroendometritis

D. Remnants of placental tissue after labour

E. Lactostasis

6. Examination of placenta revealed a defect. An obstetrician performed manual investigation

of uterine cavity, uterine massage. Prophylaxis of endometritis in the postpartum period should involve the following actions:

A. Antibacterial therapy

B. Instrumental revision of uterine cavity

C. Haemostatic therapy

D. Contracting agents

E. Intrauterine instillation of dioxine

7. A woman addressed a gynecologist on the 20th day of puerperal period with complaints of pain in the left mammary gland, puruent discharge from the nipple. Objectively: Ps- 120/min., body temperature is 39oC. The leftmammary gland is painful, larger than the right one, the skin there is hyperemic; in the upper quadrant there is an infiltrate 10x15 cm in size with soft center. Blood test: ESR- 50 mm/hour, leukocytes - 15, 0 · 109/l. What would be the treatment tactics?

A. Transfer to a surgical department for surgical treatment

B. Refer to a gynecology department

C. Refer to a postnatal department

D. Refer to a surgeon for conservative treatment

E. Lance the mammary gland abscess in a maternity department

8. A maternity patient breastfeeding for 1,5 weeks has attended a doctor. She considers the onset of her disease to be when proportional breast engorgement occurred. Mammary glands are painful. Body temperature is 36, 6oC. Expression of breastmilk is hindered. The most likely diagnosis is:

A. Lactostasis

B. Infiltrative mastitis

C. Suppurative mastitis

D. Chronic cystic mastitis

E. Gangrenous mastitis

9. On the 9th day after childbirth the obstetric patient developed high fever up to 38oC. She complains of pain in the right mammary gland. The examination revealed the following: a sharply painful infiltrate can be palpated in the right mammary gland, the skin over the infiltrate is red, subareolar area and nipple are swollen and painful. What is your diagnosis?

A. Abscess of the right mammary gland

B. Mastopathy

C. Cancer of the right mammary gland

D. Serous mastitis

E. Fibrous cystic degeneration of the right mammary gland

10. A woman complains of temperature increase up to 39oC, sharp pains in her lower abdomen, and sanguinopurulent discharge from her genital tracts. From her case history it is known that 6 days ago she underwent illegal abortion. Objectively her blood pressure is 100/60 mm Hg, pulse is 110/min. Abdominal rigidity, rebound tenderness (Bloomberg's sign), and painful palpation of the lower abdomen are observed. On bimanual examination the uterus is enlarged up to 7 weeks of pregnancy, painful, and soft; posterior vaginal fornix overhangs. Make the diagnosis:

A. Pelviperitonitis

B. Endometritis

C. Acute adnexitis

D. Pyosalpinx

E. Metroendometritis

11. A postparturient woman, who has been breastfeeding for 3 weeks, made an appointment with the doctor. For the last 6 days she has been feeling unwell, complains of body temperature of 38-39oC, general weakness; within the last 2 days she developed pain and redness in the area of her right mammary gland. Examination revealed her mammary gland to be significantly enlarged and deformed; breast tissue fluctuations and lymphadenitis are observed. What type of mastitis is the most likely?

A. Phlegmonous mastitis

B. Serous mastitis

C. Infiltrative mastitis

D. Lactostasis

E. Mammary edema

12. A 22-year-old postparturient woman on the 12th day after the normal childbirth informs of elevated body temperature up to 39°C for the last 3 days and pain in her right mammary gland. The right mammary gland is enlarged, hot to touch, tense, hyperemic, and painful. Palpation reveals there a dense infiltration 8x8 cm with a fluctuation in its center. What is the most likely diagnosis?

A. Postpartum period, day 12. Right-sided lactostasis

B. Postpartum period, day 12. Right-sided infilrativ-purulent mastitis

C Postpartum period, day 12. Right-sided gangrenous mastitis

D. Postpartum period, day 12. Right-sided phlegmonous mastitis

E. Postpartum period, day 12. Right-sided serous mastitis

13. On the day 4 after the cesarean section a woman developed fever with body temperature up to 39°C and abdominal pain. Pulse - 104/min. She vomited twice. The patient is sluggish, her tongue is dry and has gray coating. The abdomen is distended. Signs of peritoneal irritation are positive in

all segments. Peristalsis cannot be auscultated. No passage of gas occurs. Uterine fundus is located at the level of the navel. The uterus is painful on palpation. The discharge is moderate and contains blood and pus. What is the most likely diagnosis?

A. Diffuse peritonitis

B. Pelvic peritonitis

C Metroendometritis

D. Progressive thrombophlebitis

E. Parametritis

14. Multypara, 32 y.o., is in the I stage of labor for 5 hours. Light amniotic fluid has flown out 1 hour ago. Signs of clinical disproportion are absent. At internal obstetric examination head of the fetus is pressed to inlet to the small pelvis, fetal bubble is absent. Disclosure of uterine cervix is 2 sm. Choose the optimum labor management?

A. Medicinal dream

B. Labor inducing

C. Cesarean section

D. Treatment of uterine inertia

E. Obstetric forceps

15. Woman-in-labor 25 y.o., is in I stage of duly labor during 14 hours with normal patrimonial activity. Sizes of the pelvis 26-28-30-18 sm. Palpitation of the fetus is dull, rhythmical, 85 b/min. Prospective mass of the fetus 3200.0+200 gr. Internal obstetric examination: disclosure of uterine os is complete, head of the fetus is in pelvic cavity. What is the tactics of labor management?

A. Applying of output obstetric forceps

B. Applying of cavity obstetric forceps

C. Conservative labor

D. Cesarean section

E. Fetus destroying operation

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3.2. Educational materials, recommendations (instructions) for performing tasks

Operative delivery

An operative delivery is performed if a spontaneous birth is judged to pose a greater risk to mother or child than an assisted one. Operations are divided into abdominal methods (caesarean section) and vaginal assisted deliveries (forceps delivery and vacuum extraction).

Preparations for operative delivery

- Discuss operative delivery with the woman and her partner (if time is short, at least outline what will happen)
- Follow the woman's wishes—no operative delivery can proceed without her consent even if the doctors think that the baby will die if it is not done
- Get written consent for elective procedures
- A paediatrician should attend any delivery where problems are anticipated; local guidelines should be drawn up and followed for all operative deliveries

Indications for caesarean section

- Cephalopelvic disproportion—When it is obvious either antenatally or in the early stages of labour that the fetus, presenting by the head, is not going to pass through the pelvis
- Relative cephalopelvic disproportion—The fetus descends initially during labour but is then arrested, possibly due to a malposition such as occipito-posterior
- Placenta praevia—Particularly if it is overlapping the internal os
- Fetal distress—In the first stage of labour
- Prolapsed cord
- To avoid fetal hypoxia—When there is poor perfusion of the placental bed (for example, pre-eclampsia)
- Malpositions—For example, brow
- Malpresentations—For example, transverse lie, breech
- Bad obstetric history
- Maternal request – only in separate countries

Caesarean section

Use

The frequency of this operation in Britain has increased from about 5% in 1930 to about 16% now. In a survey of 327 obstetricians by Savage et al in Great Britain in the early 1990s, the main reason reported for this rise (cited by 48% of respondents) was litigation (defensive medicine).

In the United States, where the rate for caesarean sections is even higher, close scrutiny by peers and consumer groups has been associated with a reduction; the same may happen in Britain. Even in Britain, the rates vary widely between units.

Indications

The only absolute indications for caesarean section are cephalopelvic disproportion and major degrees of placenta praevia. The rest demand a judgment by the obstetrician that the risk of vaginal delivery exceeds the risk of the operation or that the mother's perception is that it does.

Caesarean sections are often carried out for debatable indications—for example, breech presentation after 34 weeks. The safety of vaginal birth in these situations often depends on the skill of the birth attendants. Recent evidence shows that perinatal mortality is increased at night and at weekends, when senior staff are less readily available, and is even higher in August and in February, when new resident

staff arrive (Maternity Statistics, 1997). With shorter training hours and less exposure to difficult vaginal deliveries, deskilling of obstetricians has occurred, so that an elective caesarean section during office hours may well be seen to be safer than a difficult vaginal birth performed out of hours by a junior doctor.

The use of repeat caesarean section depends on the indication for the first caesarean section. If the indication was recurrent—such as a small pelvis—this demands a repeat caesarean section. If however, the indication was not necessarily recurrent—such as fetal distress—vaginal delivery can be tried. In Britain about two thirds of women who have had a caesarean section try a vaginal delivery in their next pregnancy, and in about two thirds of these a vaginal delivery is successful.

Procedure

How to perform a caesarean section is best learned in the operating theatre with a mentor. It must be learned through practice, with skilled teachers assisting. What follows here is a brief account of the operation—to show what happens, not how to do it. The usual approach is through a transverse lower abdominal incision (Pfannenstiel's incision). Having opened the abdomen carefully, the obstetrician exposes the lower segment of the uterus. The visceral peritoneum is incised and the bladder pushed down, having previously been drained with an indwelling catheter. The uterus is opened slowly with a transverse incision, and when the bulge of membranes appears, this is pricked and the amniotic sac is opened fully with a finger from each side.

The baby is delivered; if presentation is by the head, sometimes a pair of short obstetric forceps is helpful. With a breech presentation, the legs are brought down and a modified breech extraction is performed. If the lie is transverse, the obstetrician aims to bring down the legs to move the baby into a breech position. Care has to be taken not to bring down an arm.

Syntometrine is given, and the placenta is delivered by controlled cord traction. Manual removal increases the blood loss and should be performed only if the placenta is adherent. The uterus is closed in layers, as is the abdominal wall.

A vertical uterine incision used to be used but is now done only in exceptional circumstances: if the lower segment is unapproachable because of fibroids; if there is a transverse fetal lie with the back inferior; or if the lower segment is not formed (for example, before 28 weeks' gestation). Such an incision means that future births will probably be by caesarean as rupture of the vertical scar in the next labour is many times more common than rupture of a transverse scar, and a rupture in the upper segment bleeds much more than one in the lower segment.

Complications of caesarean section

Haemorrhage

- Worst from the angles of the uterine incision or with placenta previa

Infection

- Prophylactic antibiotics usually given for caesarean sections, particularly if done after the membranes have ruptured

Thrombosis

- Eight times the risk than after vaginal deliveries
- Commonly occurs in the leg or pelvic veins
- Risk that the thrombus may embolise to a pulmonary vessel
- Prophylactic anticoagulation is given, particularly for those at highest risk (age over 35, anaemia, history of thrombosis, obese)

Ileus

- Mild ileus may last for a day after operation
- Treat conservatively with intravenous fluids and no oral fluids until the mother has passed flatus

Most caesarean sections are now performed under a regional block—spinal (fastest and densest block) or an epidural (allows postoperative top ups for continuing pain relief). General anaesthesia is best avoided as the incidence of complications postoperatively is substantially higher (aspiration of stomach contents, chest infections, and thrombosis). The main indications for general anaesthesia are maternal anxiety, an operation that is likely to be complicated, or, in an emergency, when there is insufficient time to establish an epidural or spinal block.

Complications

Currently, most women receive antibiotic prophylaxis as many studies have shown this to be cost effective, and subcutaneous heparin is increasingly given to prevent venous thrombosis and embolism. The latter is mandatory if there are additional risk factors, such as pre-eclampsia, prolonged inactivity, or obesity.

Postoperative care

The woman usually rises from her bed in the first 24 hours to exercise her legs and to go to the lavatory. The wound is commonly closed with clips or subcuticular prolene; the former can be removed on the fourth day, and this is now the peak time for discharge from hospital. Pain, lack of sleep, and difficulty with establishing breast feeding must all be watched for and dealt with appropriately. A discussion on the next day with the parents explaining why the caesarean was necessary is useful as many women have poor recollection of emergency events. Women should be assessed for any resulting psychological morbidity and appropriate help offered.

Forceps

A pair of curved blades can secure a purchase on the rounded head and so apply traction to alter the speed of progress. Usually this is to hasten delivery, but occasionally it is to slow it down, as when delivering the after-coming head in a breech delivery.

Forceps deliveries are performed in 5-10% of deliveries depending on the indication, the availability of trained obstetricians, and the population served. In Britain, use of vacuum extraction is now greater than use of forceps because of reduced maternal trauma; both forms of vaginal delivery, however, are giving way to caesarean section.

Indications for using obstetric forceps

- Fetal distress in second stage of labour
- Maternal distress in second stage of labour
- Lack of advance in second stage of labour
- Prophylactic shortening of second stage—for example, in heart disease
- Control of after-coming head in a breech delivery

Indications

All indications are relative and depend on the facilities for diagnosis and the attitudes of the professional staff.

Types of instruments

There are two types of forceps—those with a pelvic curve, and those without. Kielland's forceps are for rotation and extraction; Simpson's forceps are for midcavity assisted delivery without the need for rotation when the maximum diameter of the fetal head is about 5-8 cm above the vulva. Short forceps (Wrigley's) are for low extraction when the maximum diameter is about 2.5 cm above the vulva. These were designed for use by general practitioner obstetricians, with the safety feature that they could not reach high into the pelvis.

Procedure

How to use forceps is again best learned by watching and doing the procedure under skilled tutelage. The woman should receive an explanation of what will happen.

Criteria to be fulfilled before forceps delivery

- Cervix must be fully dilated—attempts to apply forceps blades with an undilated cervix will lead to much trauma and bleeding without successful delivery

- Bladder must be empty—if necessary emptied with a catheter. This prevents trauma and subsequent lack of bladder sensation
- Membranes should be ruptured
- No obvious bar exists to delivery, such as disproportion
- Episiotomy should usually be performed to allow space for the posterior pull
- Analgesia—some form should be used: lignocaine pudendal block with infiltration to the vulva is sometimes enough for a mid-cavity forceps; more anaesthesia (epidural or spinal) is usually needed for rotation forceps

The bladder is catheterised, and regional anaesthesia is given. Each blade is slipped beside the fetal head, the vagina being guarded by the operator's hand. When correctly sited, the handles should lock, and gentle traction in the correct line of pull will help delivery. An episiotomy is usually required to achieve a line of pull sufficiently posterior. Once the head is crowned, the blades can be removed and the rest of the baby delivered normally.

Complications

A perineal tear may extend from the episiotomy, leading to:

- Damage to the vagina or rectum;
- Bleeding;
- Reflex retention of urine.

Fetal scalp haematoma may occur. If the blades are applied improperly, intracranial haemorrhage can follow. Temporary facial palsy may be due to pressure on the facial nerve in front of the fetal ear where the nerve is unprotected. Permanent facial palsy is rare and probably due to a developmental abnormality.

Vacuum extractor

Vacuum extraction is fast becoming the method of choice for vaginal assisted delivery. A negative pressure raises an overhang of soft tissues in the rim of the metal cap, so that the pull is on the overhang of the fetal scalp at this edge. Silastic caps give more surface area applied to the scalp.

Vacuum extraction is widely used in Europe, increasingly in Britain, and least in the United States. Depending on the skills of the obstetrician, about 5% of deliveries can be assisted by a vacuum extractor.

Indications

The vacuum extractor can be used in the first stage of labour before dilatation of the cervix, although this is now rarely done and is potentially dangerous for less experienced staff. Vacuum extractors have a safety factor—they will come off if too much traction is applied, so they are not useful with even mild disproportion. They require less maternal analgesia and cause less maternal trauma than forceps, but the incidence of scalp trauma in the baby is increased; they should not be used before 34 weeks' gestational age because of the softer fetal head.

Indications for use of vacuum extractor (ventouse)

First stage of labour (rarely)

- Fetal distress after cervix is 8 cm dilated in a multiparous woman
- Lack of advance after 8 cm dilation in a multiparous woman

Second stage of labour (commonly)

- Lack of advance—often with occipito-posterior or occipito-transverse position
- After an epidural has relaxed the pelvic floor
- If the mother is tired
- If the head of a second twin is high

Types of instruments

The conventional vacuum extractor has a metal cap of 60 mm, 50 mm, or 40 mm diameter. The negative pressure is usually applied by a foot controlled vacuum pump. There are also Silastic caps, which cause fewer abrasions but exert less traction. They have irregularities of their inner surface for a better grip of the scalp, which is particularly useful for helping rotation through the birth canal.

Procedure

Vacuum extraction is best learned by watching and helping a more senior operator. In essence, the largest cap possible should be used. It should lie flat against the fetal head. The pressure is reduced so that it is below 0.8 kg/cm2 atmospheric pressure. A check should be made that no part of the vaginal wall (or, if not fully dilated, the cervix) has been sucked in. The cap is held on to the head with the left hand as traction is applied with the right hand. The correct line of pull is very important to prevent the cap coming off and the head not flexing correctly. An early episiotomy is often required to allow the pull to be sufficiently posterior.

Complications

Damage can occur to the cervix if not fully dilated and to the vaginal wall. Such damage can be prevented by checking that no redundant wall is sucked into the cap

while the negative pressure is being raised. Haematoma of the baby's scalp sometimes occurs but usually disappears in a week; scalp abrasions may also occur but usually heal readily.

Genital tract trauma

The perineal skin does not stretch as well as the vagina, probably owing to the increased fibrous content of the skin compared with vaginal epithelium. Perineal tears are classically divided into three grades according to severity.

Staging of degrees of perineal tear in order of severity

- Stage 1: Skin of fourchette or vagina only
- Stage 2: Skin and superficial perineal muscles
- Stage 3: Anal muscles and sphincter involved*

*In the United States, stage 3 is confined to tears to the anal margin, and involvement of the sphincter and rectal mucosa becomes stage 4

Indications for episiotomy

- To speed the later part of the second stage of labour in the presence of fetal distress
- To open up posterior areas to allow the correct line of traction at forceps or vacuum extraction
- To overcome a perineum that is rigid and delaying the last part of delivery
- If there is likely to be a major perineal tear, an episiotomy may prevent it and may be easier to repair

If the perineum seems to be splitting, an episiotomy is often performed to limit the damage. Episiotomies are not done routinely now but for specific indications; in Britain the rate varies from 15% to 40% of women, depending on the hospital.

An episiotomy should always be done under anaesthesia (at least 1% lignocaine infiltration). In Britain an episiotomy is usually mediolateral so that if the incision extends, it does not run into the anus. Episiotomies are usually repaired by trained midwives, preferably the one who performed the episiotomy.

Occasionally the episiotomy will extend at its upper end in the vaginal tissues into one of the fornices. This must be checked for carefully when repairing. It is important for haemostasis to put in at least one stitch above the highest point of the cut or tear to occlude vessels coming in from above.

Operative deliveries are performed by trained obstetricians, but the events leading up to and following such deliveries are in the care of many other health workers, all of whom should be knowledgeable about the subject

Post-natal infection directly related to pregnancy and families, developing a period of 2-3 days, after delivery to the end of 6 th week and due to infection (mostly bacterial).

Some concepts and terms of postnatal infection

Nosocomial infection (hospital) - any clinically expressed infectious disease that emerged in the patient during his stay in obstetrical hospital or within 7 days after discharge from it as well as medical personnel, which occur as a result of his work in the obstetrical hospital.

Most bacterial nosocomial infections occur within 48 hours after admission (birth). However, every case of infection should be assessed individually depending on the incubation period of these nosologic forms of infection.

Infection is not considered internally hospital if:

• presence of infection in patients in the incubation period for admission to hospital;

• extension of infection or complications that occurred in patients at the time of hospitalization.

Infection is internally hospital if:

• acquiring it in hospital;

• intranatal infection.

Profiles of antibiotic-resistance determinants of a combination of each selected strain of microorganism. Antibiotic resistance profiles characterize the biologic features of the microbial ecosystem that has formed in the hospital. Permanent tracking the emergence and circulation in a separate hospital strains conditionally pathogenic microorganisms (UPM) with the same antibiotic resistance profiles is essential for detecting hospital strains of UPM and studying the epidemiology of hospital infections.

Hospital with multiple strains of bacteria resistant to at least five antibiotics:

• for staphylococcal strains - to metytsilinu (oxacillin) and / or vancomycin;

• for strains enterokokiv - to vancomycin;

• for enterobacteria - to gentamicin and / or cephalosporin antibiotics III-IV generations;

• nefermentuyuchyh for bacteria - to cephalosporin antibiotics III-IV generations.

Classification

In the CIS countries for many years used classification S.V.Sazonova-AV Bartels, under which various forms of post-natal infections are considered as separate stages of the dynamic of infectious (septic) process, and are divided into limited and extensive. This classification does not correspond to modern understanding of the pathogenesis of sepsis. Significantly changed the interpretation of the term"fever"in connection with the introduction of a new concept -"systemic inflammatory response syndrome."

Modern classification of postpartum purulent-inflammatory diseases suggests their distribution to the limited and conditional Generalized forms. To include limited conditional postnatal wounds fester, endometritis, mastitis. Generalized form presented peritonitis, sepsis, septic shock. The presence of systemic inflammatory response in childbirth with relatively limited form of the disease requires intensive monitoring and treatment as in sepsis (sepsis classification see below).

Natal infection most likely occurs when body temperature increase of more than 380p through the uterus and painful 48-72 hours after birth. In the first 24 hours after birth is often observed in normal fever. Approximately 80% of women with fever during the first 24 hours after birth through natural family ways no signs of infection.

In the international classification of disease X view (ICD-10, 1995) also distinguish the following natal infectious diseases section of postpartum sepsis:

085 Postpartum sepsis

Postpartum (a)

- Endometrium;

- Fever;

- Peritonitis;

- Septicemia.

086.0 Infection of obstetric surgical wound

Injected (s)

- Wound after cesarean section delivery

- Crotch seam

086.1 Other infection of genital tract after childbirth

cervicitis after birth

vaginitis

087.0 superficial thrombophlebitis in the postpartum period

087.1. Deep phlebothrombosis in the postpartum period

Deep vein thrombosis in the postpartum period

Pelvic thrombophlebitis in the postpartum period.

Etiology

Leading cause of obstetric complications are septic association gram and gram-negative anaerobic and aerobic microbes, while the predominant opportunistic flora. In the last decade as a role of these associations are playing infection, sexually transmitted diseases, a new generation: chlamydia, mycoplasma, viruses, etc..

Condition normal microflora of female sex organs play an important role in the development of pyo-septic diseases. Found high correlation between bacterial vaginosis (vaginal bacteria overgrowth) in pregnant women and infection of amniotic fluid, pregnancy complications (horionamnionytom, preterm labor, premature rupture of membranes, postpartum endometritis, fetal inflammatory complications).

Despite the large variety of pathogens in most cases, postpartum infection revealed the following:

• Gram-positive bacteria (25%). Staphylococcus aureus - 35%, Enterococcus spp. - 20%, Coagulase-negative staphylococcus - 15%, Streptococcus pneumonie -10%, and other Gram-positive - 20%.

• Gram-negative bacteria (25%). Escherichia coli -25%, Klebsiella / Citrobacter - 20%, Pseudomonas aeruginosa - 15%, Enterobacter spp. - 10%, Proteus spp. - 5%, and others - 25%.

• fungi of the genus Candida - 3%

• anaerobic flora - with special research methods 20%

• unidentified flora - in 25% cases.

Pathogenesis

Inflammation - a normal response of the organism to infection and may be defined as a localized protective respond to tissue damage, the main problem is the destruction of microorganisms and pathogen-damaged tissues. But in some cases the organism responsible for infection over the massive inflammatory reaction.

Systemic inflammatory response - a systemic inflammatory response activation secondary to functional failure mechanisms limiting the spread of microorganisms, products of their life from the local area damage.

Currently, proposed to use such terms as"systemic inflammatory response syndrome"(SIRS - SIRS), and treat it as a universal immune system response to the impact of strong stimuli, including infection. When infection such stimuli are toxins (exo-and endotoxins) and enzymes (hialuronidaza, fibrinolysin, collagenolytic, proteinaza) produced by pathogenic microorganisms. One of the most powerful factors starting a cascade of reactions SIRS lypopolisaharyd (LPS) membrane of Gram-negative bacteria.

The basis of SIRS is the formation of excessively large number of biologically active substances - cytokines (IL1 interlekiny and IL 6, tumor necrosis factor TNFα, leykotryyeny, γ-interferon, endothelin, platelet-activating factor, nitric oxide, kinines, histamine, thromboxane A2, etc.). that have pathogenic effects on endothelium (disrupts coagulation, microcirculation), increase vascular permeability, leading to tissue ischemia.

Outlines three stages of SIRS (Bone RS, in 1996):

1-stage - local cytokines production - in response to inflammatory mediators influence infection a protective role, and destroy the microbes involved in the process of healing wounds.

2-nd stage - a small number of cytokines release in systemic circulation - is controlled by the pro-and antiinflammatory mediator systems, antibodies to create conditions for destruction of microorganisms, wound healing and maintain homeostasis.

Third stage - a generalized inflammatory response - the cascade of inflammatory mediators in blood increased as much as possible, the destructive elements of their starting to dominate, leading to endothelial disfunction with all the consequences.

Generalized inflammatory reaction (systemic inflammatory response syndrome) is likely to manifest infection is defined as sepsis. Classification of sepsis in the relevant section.

Risk Factors

Possible sources of postnatal infection (risk factors) that may exist before pregnancy detected:

1) upper respiratory tract infection - particularly if the use of general anesthesia;

2) epidural infection environments;

3) thrombophlebitis: lower extremities, pelvis, for vein catheterization;

4) urinary infection (asymptomatic bacteriuria, cystitis, pyelonephritis);

5) bacterial endocarditis;

6) appendicitis and other surgical infections.

By enabling factors of postpartum infectious complications include:

1. Cesarean section. The presence of suture material and the presence of ischemic necrosis of infected tissue, along with cuts on the uterus provide ideal conditions for septic complications.

2. Prolonged labor and premature rupture of amniotic membranes, leading to horionamnionytu.

3. Traumatization of vaginal tissues during labor: the imposition of pliers, cut the crotch, repeated investigations vagina during childbirth, vnutrishnomatkovi manipulation (manual removal of placenta, manual examination of uterus cavity, internal rotation of fetal internal monitoring of the fetal uterus and cuts, etc.).

4. Reproductive tract infections.

5. Low social level, combined with poor nutrition and poor hygiene.

The causes generalized infection may include:

• incorrect surgical volume and inadequate surgery;

• wrong choice of volume and components antibacterial, detoxification and symptomatic therapy;

• reduced or altered imunoreaktyvnist macroorganism;

• presence of severe concomitant diseases;

• presence of antibiotic-resistant strains of bacteria;

• lack of any treatment.

The clinic, diagnosis and treatment of relatively limited postpartum infections

Natal infection - primarily wound. In most cases the primary center is localized in the uterus, where the playground area of placental separation after the placenta is a large wound surface. Possible infection breaks perineum, vagina, cervix. After caesarian section infection may develop in operating the anterior abdominal wall wound. Toxins and enzymes produced by microorganisms that cause wound infection, can enter the vascular bed at any location of primary fire.

Thus, any conditionally limited, localized protective response natal infection may cause the development of sepsis.

The common clinical signs of inflammatory reaction to:

• local inflammatory reaction: headache, flushing, swelling, local rise in temperature, dysfunction of the affected organ;

• total body response: hyperthermia, fever. Intoxication symptoms (malaise, tachycardia, lower blood pressure (BP), tachypnea) showed SIRS development.

When the diagnosis data included:

• clinical: a review of the damaged surface, evaluation of clinical signs, complaints, anamnesis,

• laboratory: total blood (leykohrama), total urine analysis, bacteriological study fluid, immunogram;

• tool: ultrasound (U.S.).

Ambulatory diagnosis and treatment of infected wounds post-natal

Clinical signs of infection in wounds that are healing by first intention:

a) complaints

• of intense, often pulsating pain in the wound area;

• to increase body temperature - subfebrylna or 38-390S.

b) the changes:

• hyperemia around the wound without positive dynamics;

• the emergence of tissue edema, which gradually increases;

• palpation determined by infiltration of tissue, often increases the possible occurrence of deeply located infiltrates (nekrotyzuyuchyy fastsyt that can spread to your buttocks, abdomen anterior abdominal wall - often fatal complication);

• serous fluid quickly turns into pus.

Clinical signs of infection in wounds are healing secondary tension:

• progressive edema and infiltration of the tissues around the wound;

• painful emergence of dense infiltrates without clear contours;

• Signs and limfanhoyitu lymphadenitis;

• wound surface covered with solid fibropurulent bloom;

• slow or halt epithelial;

• granulation becomes pale or cyanotic, their bleeding decreases dramatically;

• increasing the number of fluid, it depends on the nature of the pathogen:

staphylococcus causes the appearance of thick yellowish pus, and some strains cause the development of putrid infection with the formation of local foci of tissue necrosis and pus muddily gray with a sharp odor;

for streptococcus characterized by the appearance of liquid manure yellow-green ichor;

enterokokova Kolibatsylyarna infection and cause the emergence of dung brown color with a characteristic smell;

synehniyna bacillus (Pseudomonas aeruginosa) leads to the emergence of green manure with a specific smell.

View agent also determines the clinical course of wound infection:

• for an infection of staphylococcus fulminant local development process with stronger of purulent resorbtive fever;

• streptococcal infection tends to spread as diffuse phlegmon, with weakly pronounced local features;

• sticks to synehniynoyi typical indolent, protracted course of the local process, after the sharp early, with pronounced manifestation of intoxication.

Fluid bacteriological research conducted to determine the pathogen and its sensitivity to antibiotics. Induction material should be performed before antibiotic therapy. Material for research may be fluid, tissue slices, washed with wounds. Material collected sterile instruments and placed in sterile test tubes or bottles with standard medium. Planting material should be made within 2 hours after the collection. Along with taking material for bacteriological study must make at least two smears stained by Gram, to approximate rapid diagnosis.

They can be used accelerated identification of the causative agent of wound infection by multimikrotestiv systems, methods of playing 4-6 hours.

In the absence of microbial growth in clinical material to exclude the following reasons:

• Availability of material sent in high concentrations of local or systemic antibacterial agents;

• violations of the storage and transport of samples;

• methodological errors in baklaboratoriyi;

• effective control of wound infection process of antibacterial drugs;

• presence of anaerobic infection.

Treatment

In most cases, a local treatment is sufficient. Treatment includes surgery, physiotherapy and pharmacological methods.

Debridement of wound

Primary treatment of wounds performed on the original indications. Repeated primary debridement performed if the first surgery on those or other reasons was not a radical and necessitated reintervention before the development of infectious complications in the wound.

Debridement consists of:

• Removal of wound vitality of tissues that are substrate for primary necrosis;

• Removal of hematoma (especially deep-seated);

• stop the bleeding;

• restoration of damaged tissues.

Secondary processing is performed by secondary wound indications, usually in connection with purulent-inflammatory complications of wounds. Repeated secondary treatment of severe wounds in wound infection can be performed repeatedly. In most cases, secondary debridement includes:

Removing fire • inflammatory infectious alterations;

• broad disclosure pocket, Bay;

• the provision of a full drainage outflow of fluid;

• use of local antiseptics;

Pharmacological methods is antibacterial therapy .

Antibiotic prophylaxis is a systemic administration of antibacterial drugs prior to microbial contamination of wounds or postoperative wound infection, and signs in the presence of contamination, provided that the initial surgical treatment. Appointed by the antibiotic at risk of exposure of massive wounds perineum, vagina and laparotomy wounds during cesarean section.

Principles of antibiotic prophylaxis:

• by cesarean section without complications after the department conducted a child by a single intravenous dose of antibiotic in average on the basis of the identified hospital strains and their antibiotic resistance;

• in case of complications during surgery or signs of the inflammatory process the same drug can be used for antibiotics;

• continued introduction of antibiotics after 24 hours from the end of the operation does not lead to more effective prevention of wound infections;

• prophylactic antibiotics early appointment for surgery is pointless, because it leads to violations biocenosis gastrointestinal colonization and its upper parts.

Antibiotic therapy - the use of antibiotics for prolonged treatment in case of inflammatory process.

Antibiotics can be:

• Empirical - founded on the use of broad-spectrum drugs, active relation to potential pathogens;

• focused - used drugs according to the results of microbiological diagnosis.

It is important to use local antiseptics. To clean the wound can use 10% solution of sodium chloride, 3% hydrogen peroxide, 0.02% solution chlorheksidine others. For more rapid healing can be used on pads levomikolevoyu or levosynovoyu or syntomitsynovoyu or solkoserylovoyu ointments, etc..

By physiotherapeutic procedures during period of recovering owned UHF-induktoterapiya, ultraviolet irradiation, electrophoresis with medicinal drugs.

Prevention of wound infection is a rational conduct of childbirth and postnatal period, subject to asepsis and antisepsis.

Ambulatory Diagnosis and treatment of puerperal endometritis

Postpartum endometritis (endometritis) - an inflammation of the superficial layer of the endometrium. Endomyometritis (endomiometritis or metroendometritis) - is spreading inflammation of the basal layer of endometrium to the myometrium. Panmetryt (panmetritis) - is spreading inflammation of the endometrium and myometrium to uterine serous layers.

Clinic

The initial stage of puerperal endometritis may be different expressiveness and have poliformnu picture. Should distinguish between classical, erased and abortive forms of endometritis and endometritis after cesarean section. Classical forms endometritis usually develops 3-5 days after birth. For this specific form of fever, intoxication, mental change, expressed leukocytosis with left shift count, abnormal discharge from the uterus. When endometritis erased form of the disease usually develops in 8-9 days after birth, the temperature subfebrylna, local manifestations had expressed. Abortive form of endometritis and runs as a classic, but a high level of immunological defense quickly stops. Endomyometritis after cesarean section may complicate pelvioperytonitom, peritonitis, which develops develop 1-2 days after surgery.

Diagnosis based on:

• Clinical data: complaints, anamnesis, clinical examination. When vaginal study dam moderately sensitive, subinvolyutsiya uterus, purulent selection;

• laboratory data: total blood (leykohrama), total urine analysis, bacteriological and bacterioscopic study of cervical secretions and / or uterus (blood and urine if necessary), immunogram, coagulogram, blood biochemistry;

• instrumental data: ultrasound (U.S.).

Treatment

In most cases, pharmacological treatment, but also possibly surgery.

Combined treatment of postpartum endometritis includes not only systemic antibacterial, infusion, therapy detoksikatsinu, but topical treatment. Empirical antibiotic therapy and can be focused (see above). Preference is given to a focused antibiotic therapy, possibly using the accelerated identification of the causative agent using the system multimikrotestiv. If the fever lasts for 48-72 hours after treatment, it is suspected pathogen resistance to antibiotics used. Intravenous antibiotic treatment should last for 48 hours after the disappearance of hyperthermia and other symptoms. Tablets should prescribe antibiotics even for the next 5 days.

Necessary to consider that antibiotics fall in milk. Immature enzyme systems of babies can not handle the full withdrawal of antibiotics, which can lead to a cumulative effect. The degree of diffusion of antibiotics to breast milk depends on the nature of antibiotic. In a limited number transferred to breast milk penitsiliny, cephalosporin, a large number - aminoglycosides, Tetracycline, macrolides. Therefore at their destination stop breast-feeding a baby.

Local therapy in endometrial wash-flow is drainage of uterine cavity, using dvoprosvitnoho catheter through which make the uterine wall irrigation solutions antiseptics, antibiotics. Use chilled 4 0C chlorheksidine 0.02% solution, 0.9% isotonic sodium chloride solution speeds 10ml/hv. Contraindications to aspiration-drainage of uterine flushing are: failure of seams in the uterus after caesarian section, infection has spread beyond the uterus, and the first days (up to 3-4 days) postnatal period. When pathological inclusion (rolls of blood remnants of membranes) of uterine cavity by flushing the drainage can not wash, they must remove the vacuum aspiration, or careful curettage of the background of antibacterial therapy and normal body temperature. In the absence of these conditions curettage is performed only for the life conditions (bleeding in the presence of remnants of the placenta).

Resort to surgical treatment of the case ineffectiveness of conservative therapy and the presence negative dynamics in the first 24-48 hours of treatment of systemic

inflammatory response syndrome (SIRS). Surgical treatment is laparotomy with hysterectomy and uterine tubes.

Correct treatment of postpartum endomyometritis based prevention common form of infection in mothers.

Lactational mastitis

Lactational mastitis - an inflammation of the breast (mostly unilateral) during lactation in the postpartum period. Often developing 2-3 weeks after birth.

Etiology and pathogenesis

Most atrium is cracked nipples, penetration intrakanakulyarne pathogen infection through breast milk ducts during lactation or milk ztsidzhuvanni, rarely parasite spreads from endogenous foci.

Risk factors:

• cracked nipples;

• laktostaz.

Cracks can be at nipples malformation soother, when the child later application to the chest, poor feeding technique rough ztsidzhuvanni milk of individual epithelial cover soother, violating sanitary-epidemiological norms postpartum period.

When laktostazi may increase body temperature up to 24 hours if more than 24 hours - then this state should be viewed as mastitis.

Classification

I. The nature of the flow of breast inflammatory process can be:

• serous;

• infiltrative;

• purulent;

• infiltrative-purulent, diffusion, nodular;

• abscess (abscessed),: furunculosis areola, areola abscess, abscess in

• thicker gland abscess behind the gland;

• abscess, purulent necrotic;

• gangrenous.

II. For localization of foci mastitis can be:

• subcutaneous, subareolyarnym, intramamarnym, retromamarnym and total.

The clinical picture

The clinical picture is characterized by mastitis: acute beginning, pronounced intoxication (malaise, headache), fever up to 38-390S, drozhzhyu, pain in the breast that increase with feeding or ztsidzhuvanni. Mammary gland increases in volume, characterized by hyperemia and infiltration of tissues without clear boundaries. This painting is typical of serous mastitis. While inefficient treatment within 1-3 days serous mastitis goes into infiltrative. When palpation determined dense, sharply painful infiltration, glandular. Duration of this phase of 5-8 days. If infiltration does not resolve on the background of the treatment is its maturation - breast abscess (abscessed). Despite the strengthening of local symptoms of inflammation, a significant increase in breast cancer and deformity if infiltrate is shallow, then fester determined fluctuation. Maturation infiltration occurs within 48-72 hours. In cases where in the breast nahnoyuyetsya few infiltrates, called breast abscess. Body temperature during this 39-400p, dryzhy expressed weakness, intoxication. Mammary gland increased sharply, painful, pastozna well expressed by superficial venous network infiltrate occupies almost the entire gland, the skin over the affected area of swollen, shiny, red with cyanotic tinge, often with limfanhitom. When gathered breast possible generalization of infection with the transition in sepsis.

Diagnostics

Diagnosis is based on the following data:

• clinical: a review of breast cancer (see text), evaluation of clinical signs, complaints, history taking;

• laboratory: total blood (leykohrama), total urine analysis, bacteriological research and bacterioscopic fluid, immunogram, coagulogram and blood biochemistry;

• tool: ultrasound (ultrasonography) - is an important diagnostic mastitis.

Treatment

Treatment could be conservative and surgical.

Antibiotic therapy should start with the first signs of disease to help prevent the development of purulent inflammation. When serous mastitis on breastfeeding solved individually. Please note: Opinion childbirth, anamnesis (eg, purulent mastitis record, numerous scars of breast cancer, breast prosthesis), conducted by antibiotics, bacteriological data and research bacterioscopic fluid, the presence and expressiveness of crack nipples. Since infiltration mastitis child feeding is contraindicated because of a real threat to the child's infection and cumulative accumulation of antibiotics in the body of a child, but breastfeeding can be maintained by ztsidzhuvannya. In the absence of the effect of conservative therapy of mastitis for 2-3 days and signs of purulent mastitis shown surgical treatment.

Surgical treatment is radical cuts and adequate drainage. Parallel continuing antibiotics, dezintoksykatsionu and desensitizing therapy. Timely surgical treatment can prevent progression of the process, the development of SIRS.

Prevention

Prevention of puerperal mastitis is teaching women breast-feeding policies and compliance with rules of personal hygiene. Need early detection and treatment of cracks and laktostazu nipples.

Ambulatory diagnosis and treatment of generalized infection after delivery

From the standpoint of modern ideas of sepsis - a typical pathological process that complicates the course of various diseases of infectious nature, the basic content of which is the uncontrolled release of endogenous mediators with subsequent development of generalized inflammation and organ-system injuries remote from the primary focus.

Sepsis can not be considered the result of direct action on the microorganism makroorhanizm, it is the result of significant violations in the immune system that are in its development stages of activation of redundant (phase hiperzapalennya), to a state of immunodeficiency (imunoparalicha phase). Immune system is an active member autodestruktyvnoho process. Very often this septicemia (presence of microbes in the blood) is absent.

Such concepts have defined modern terminology sepsis.

American Association of Anesthesiologists, in 1992 proposed the following classification of septic states recognized by most scientists.

Systemic inflammatory response syndrome (Systemic Inflammatory Response Syndrom - SIRS), manifested by two or more signs:

1) body temperature of more than 380p or lower 360S;

2) HR over 90 beats / min;

3) respiration rate 20 per minute or PaCO2 below 32 mm Hg. century;

4) WBC count more 12h109 / l or less 4h109 / l immature forms more than 10%.

Sepsis - systemic response to infection reliably detected in the absence of other possible reasons for such changes characteristic of SIRS. Manifested the same clinical signs and SIRS.

Heavy sepsis - sepsis is characterized by the dysfunction of organs, hipoperfuziyeyu tissue, arterial hypotension. Possible acidosis, oliguria, mental blankness. With the development of severe sepsis align the following features:

• thrombocytopenia less than 100 thousand / L, which can not be explained by other causes;

• raise more prokaltsytonina 6.0 ng / ml (A);

• positive blood won the detection of circulating bacteria (A);

• a positive test for endotoxin (LPS-test) (B).

Septic shock (SIRS - shock) is defined as severe sepsis with arterial hypotension, which develops despite adequate infusion therapy. Diagnosis is established if the above clinical and laboratory parameters align:

• arterial hypotension (systolic blood pressure less than 90 mm rt.st or decrease more than 40 mmHg from the reference level);

• violation of consciousness;

• oliguria (diuresis <30 ml / h);

• Hypoxia (PaO2 less than 75 mm Hg when breathing the ambient air);

• SpO2 less than 90%;

• raise more lactate 1.6 mmol / l;

• petehialna rash, skin necrosis.

Multiple organ failure syndrome - the presence of acute dysfunction of organs and systems.

Diagnostics

For the diagnosis of clinical forms of sepsis should conduct the following activities in parturients with any form of postnatal infection:

1) monitoring: blood pressure, heart rate, central venous pressure, blood leukocytes and formulas;

2) calculation of respiration rate, assessing the level of blood gases, SpO2;

3) Control hourly diuresis;

4) measurement of rectal body temperature of at least four times a day for comparison of body temperature in aksilyarnyh areas;

5) crops urine, blood, secretions from the cervical canal;

6) determination of the acid-alkaline balance of blood and tissues of oxygen saturation;

7) platelet counting and determination of fibrinogen and fibrin monomers;

8) ECG, abdominal ultrasound and X-ray studies of the chest cavity.

Basic principles of therapeutic measures

1. Hospitalization in intensive care.

2. Correction of hemodynamic disorders through inotropnoyi infusion therapy and adequate support.

Assessing arterial pressure, pulse arterial pressure, CHP, CHSS, diuresis, determine the volume of infusion therapy. Determination of CHP in the dynamics allows controlled infusion of colloid solutions and kristaloidnye with the assessment amounts imposed and the lost fluid, blood.

For derivatives used infusions hidroksietylkrohmalyu (Refortan, venofundyn, volyuven, stabizol) and crystalloid (0.9% sodium chloride solution, a solution Rynhera) in the ratio 1:2. To correct hipoproteinemiyi appoint only 20-25% of Mr. albumin. Application of 5-10% albumin in critical states increases mortality of patients (A).

In the infusion must include quick-frozen plasma 600-1000 ml, due to the presence in it of anti thrombin (B).

Inappropriate use of glucose (B), because its purpose in patients in critical states increases lactate production and CO2 increases ischemic brain damage and other tissues. Glucose infusion is used only in cases of hypoglycemia, and hypernatremia.

Inotropna support applies if the CHP is still low. Injected dopamine in a dose of 5-10 mg / kg / min (up to 20 mg / kg / min) or Dobutamine - 5-20 mg / kg / min. With no steady increase of SC injected norepinephrine hidrotartrat 0,1-0,5 mg / kg / min, while reducing the dose of dopamine to 2-4 mg / kg / min. (A). Justified by the simultaneous appointment naloksonu to 2.0 mg, which enhances AT (A).

In case of failure of complex hemodynamic therapy using glucocorticosteroids possible (hydrocortisone - 2000 mg / day (P)) with H2-blockers (ranitydin, famotidin) (B).

3. Maintaining adequate ventilation and gas exchange. Indications for ventilation are: PaO2 less than 60 mmHg, PaCO2 50 mmHg or less than 25 mmHg, SpO2 less than 85%, respiratory rate 40 per minute.

4. Normalization of bowel function and early enteral nutrition.

5. Timely correction of metabolic laboratory under constant control.

6. The decisive factor is the rational choice of antimicrobial drugs, particularly antibiotics. Targeted antibacterial therapy is possible only after determining pathogen and establishing its sensitivity to antibiotics that may be in the best case 48

hours earlier. Waiting identify empirical antibiotics used, taking into account the nature of primary foci of infection function of liver, kidney, immune system sick.

Existing trends in antibacterial therapy of pyo-septic infections include antibiotic use microbicides, not bacteriostatic, the use of less toxic analogs (for example, new generations aminohlykozydiv ftorhinolonamy or replacing them), replacing the combined antibiotics equally effective monoantybiotykoterapiyeyu; replacement imunopryhnichuyuchyh immunostimulatory antibiotics, use of adequate dose and mode.

Based on the need for growth inhibition of all predictable spectrum of pathogens obstetric infections (gram-negative and gram-positive aerobic and anaerobic bacteria) in the antimicrobial empirical therapy scheme used triple combination of antimicrobial therapy (eg, semi-synthetic penicillin, cephalosporin aminohlykozydy + + imidazole), double antibiotics (eg klyndamitsyn + aminohlykozydy) monoantybiotykoterapiyi (Y generation cephalosporin, karbopenemy, ureyidopenitsyliny, aminopenitsyliny, etc.).

Triple antimicrobial therapy is an active though relatively spectrum of pathogens, but the use of many drugs brings additional pressure on organs and systems, and the increasing number of preparations that are growing antibiotic side effects. This therapy usually involves antibiotics destination group semi penitsylyniv (Ampicillin, oxacillin) and cephalosporins generations I-II (tsefazolin, tsefaleksina, cefuroxime), which are most effective against aerobic gram-positive pathogens (staphylococci), is less effective in aerobic gram-negative pathogen is operating in pseudomonad (synehniynu stick) and anaerobic bacteria. Performance of this complex enhanced by the appointment aminohlykozydiv (gentamicin, subsp, amikacine, netromitsyn) that highly effective against gram-negative and anaerobic bacteria (enterobacteria, synehniyna sticks). Performing against anaerobic bacteria, including bakteroidy possessing drugs group imidazolov (metronidazole, ornidazol, tinidazol). In connection with the above popular triple antibiotic regime with severe purulent-septic diseases can not be considered rational.

Dual antibiotic therapy often involves a group of drugs linkozamydiv (klindamitsyn) that have a wide spectrum against anaerobic bacteria and gram-positive aerobic and Gram-negative influence on the flora additionally appointed aminoglycosides. The proposed combination is also Y-generation cephalosporin with imidazole, β-lactam with aminoglycoside antibiotics.

Monoantybiotykoterapiya might be drugs, which covers the spectrum of Gram-negative and Gram-positive aerobic and anaerobes: Y generation cephalosporin, karbopinemy. In severe sepsis the most appropriate course of medication group karbopinemiv (imipinem + tsylastyn sodium, meropenem).

In view of recent achievements of science in studying the pathogenesis of sepsis and SIRS, especially should stay on the clinical significance release endotoxin (LPS), which induced antibiotics. In this regard, has important clinical significance of the extent toksynoutvorennya induced by different antibiotics. Formation of endotoxin, induced with antibiotics is increasing in the following order: karbopenemy - smallest; aminoglycosides; ftorhinolony; cephalosporin - most.

The structure of antimicrobial therapy is mandatory inclusion antykandydoznyh drugs (nystatin, flukonazol, itraconazole, etc.)..

7. Evaluation of pathophysiological and patobiohimichnyh disorders that can be allocated in the following syndromes: kidney, liver, different variations of cardiovascular and respiratory failure, ICE syndrome, disorders of microcirculation, dysfunction of gastrointestinal tract with bacterial flora translocation phenomena in lymphatic system and then and in systemic circulation with the development of multiple organ failure syndrome. Patobiohimichni disorders manifest violations of water-electrolyte, kislotno-base balance and others. Each of the syndromes demanding approach, individual application of certain methods and tools that cover all sections of intensive care.

8. Improvement of microcirculation (or use pentoxyfilline dipiridamolu) Application pentoxyfilline (trentalu) improves microcirculation and rheological properties of blood has sudynorozshyryuvalnu action and improves tissue oxygen supply, which is important in preventing DIC and MOF.

9. Antymediatornaya therapy. Given the crucial role in the development of SIRS massive release of mediators of inflammation (cytokines) in the vascular bed, use antymediatornoyi therapy is rational. These methods are at the stage of clinical development, although some are recommended for clinical use: antioksydanty (vitamin E, N-atsetiltsysteyin, glutathione), corticosteroids (dexamethasone), lizofilin, phosphodiestherase inhibitors (Amrinone, milrinon, pentoxyfilline) and adenozindezaminazy (dipiridamol) adenozin and alfaadrenoblokatory.

In recent years literary sources provide information about Drotrekohin alpha (Drotrecogin alfa) - recombinant human activated protein C. This new drug only in patients with severe sepsis, multiple organ failure. Activated protein C - this endogenous protein that supports fibrinoliz, inhibits thrombosis, and also has anti-inflammatory properties. The standard treatment used in Britain since 2004 - is drotrekohin alpha 24 mg / kg body weight for 96 hours.

10. Surgical treatment of seizure foci of infection.

Indications for laparotomy and hysterectomy with uterine tubes are:

• lack of effect of intensive therapy (24 hours)

• endomyometritis that defies conservative treatment (24-48 hours);

• uterine bleeding;

• abscess formation in the field of oophorectomy;

• detection of ultrasound at the balance of the placenta.

11. Extracorporeal blood purification (detoxification) is a promising direction in the correction of homeostasis in severe cases. To this end, apply: hemodialysis, ultrafiltration hemofiltratsiyu, hemodiafiltratsiyu, plasmapheresis.

Clinical diagnosis and treatment of obstetrical peritonitis

Peritonitis in obstetrical practice develops more often after cesarean section. Depending on the way to distinguish a peritoneal infection forms. Early peritonitis occurs at 1-3 days after surgery. It is usually caused by infection during an operation conducted against the backdrop horionamnionitu.

Peritonitis associated with bowel paresis develops 3-5 days after surgery. It relates to breach the barrier function of intestinal obstruction due to its dynamic, with pereroztyahnennyam intestinal content by liquid and gas.

Peritonitis due to wounds of inferiority often develops in the uterus for 4-9 days after surgery. This distribution of clinical forms very conditional, but significantly affects the choice of treatment tactics

Clinical signs of peritonitis include hyperthermia, bloating and bowel paresis (absence of peristalsis), accumulation of liquid contents in the stomach, breathlessness, tachycardia, vomiting, intoxication, which is growing, peritoneal irritation. Therapeutic measures give a temporary effect, 3-4 hours again increases intestinal paresis and other signs of peritonitis.

Ultrasound signs of peritonitis: bloated, filled loops of bowel contents hiperehohennym expressed hiperehohenist intestinal wall, the presence of free fluid in the abdominal cavity between the bowel loops in the lateral channels and space behind the uterus. About deficiency stitches in the uterus shows irregular uterine wall thickness in projection seam presence in this niche segment of"fluid"and"structures."

In the treatment of early peritonitis justified intensive conservative therapy for 8 -12 pm (see treatment of sepsis). Necessary to provide drainage from the uterus, stimulating bowel function. In the absence of the effect of conservative therapy within the specified time shown laparotomy with revision of the abdominal cavity, hysterectomy with uterine tubes. Over the past fifteen years have been offered new approaches and methods of surgical treatment of abdominal sepsis, particularly purulent peritonitis. These include: a closed method (passive and active drainage,

peritoneal dialysis, relaparotomii"on demand"(if shown)), Half (turning audit and restructuring"program"in mizhoperatyvnyy readjustment period, the temporary closure of laparotomy wounds), open (laparostomiya).

Clinical diagnosis and treatment of infectious thrombotic complications

The superficial thrombophlebitis. Acute thrombophlebitis revealed pain along the affected vein. Complaints to local heat sensation, redness and tenderness along the subcutaneous veins. Leaf palpuyetsya as dense painful cord hyperemia may extend beyond the sealing veins may occur infiltration of tissues that are near, lymphadenitis. Overall condition childbirth while broken little subfebrylna temperature, accelerated pulse.

Deep vein thrombophlebitis. Complaints of pain rozpyrayuchyy on the side of lesion, swelling of affected limbs and skin discoloration. Objective manifestations corresponding compensation stage: fever (often the first and only sign of venous thrombosis), no pronounced violation of venous hemodynamics. Objective signs that match the stage of decompensation: intense pain, which often changes its localization feeling heaviness and tension, captures the entire limb swelling, limfovidtoku violations, increasing regional lymph nodes, skin color varies from pale to saturated-tsianotychnoho, dominated by diffuse cyanosis all limbs.

Diagnosis based on clinical data, laboratory tests:

• assessment of the degree embolonebezpechnosti - definition D-level diamera in plasma (D-dimer-test);

• tromboelastohrama, coagulogram;

• determine the number of fibrin-monomer in blood serum (FM-test, monotest-FM);

• identifying and fibrin degradation products in plasma fibrinogen (FDP PLASMA)

Used instrumental methods of investigation: anhioskanuvannya duplex ultrasound with color Doppler mapping, radionuclide tracer study of fibrinogen, opaque retrograde ileokavohrafiya.

Septic pelvic vein thrombophlebitis. When endomyometritis infectious agent goes into venous circulation, affects the endothelium of vessels and promotes clot formation, usually prevailing anaerobic infection. The process involved in ovarian veins, thrombi can penetrate into the lower hollow renal vein. Complaints of abdominal pain at the bottom of irradiation in the back, groin, may be nausea, vomiting, bloating, fever. In the study of vaginal palpuyetsya thickening in a rope in the corners of the uterus. When septic thrombophlebitis may be the migration of small blood clots in the pulmonary circulation of.

Treatment

Treatment trombotycheskyh complications in postpartum period along with antibiotics and deintoxication must include:

a) bed rest with the deployment of lower extremity on the tire Bellera until disappearance of edema or express purpose of anticoagulant therapy;

• Local hypothermia thrombose projection along the vascular bundle;

• elastic compression using elastic bandages;

• correction character act defecation with laxative use (warning natuzhuvannya);

b) medical therapy:

• anticoagulants in the acute stage of disease. Direct anticoagulants - heparin, low molecular weight heparin - fraksyparyn, pentoksan, kleksan, frahmin and others. with the transition to indirect anticoagulants;

• indirect anticoagulants prescribed 2 days before the abolition of direct anticoagulants for up to 3-6 months;

• hemoreolohichni active means - pentoxyfilline, reopoliglyukin, and then switch to antytrombotsytarnu therapy - aspirin, Plavix for up to 1 year;

• Tools that improve flebohemodynamiku - flebodiya, detraleks, eskuzan for 4-6 weeks;

• systemic enzyme - Vobenzim, flobenzym, biozyn.

c) local treatment, which is held from 1-day diseases:

• Local hypothermia;

• application of ointments on the basis of heparin - heparynova, troksovazinova, Lioton 1000, or NSAIDs - fastum-gel-gel diclofenac.

Prevention of postpartum infection

To prevent postpartum septic complications, the proper organization of prenatal (rehabilitation of chronic septic foci), the maternity unit of postpartum wards, strict adherence to the principles of aseptic and antiseptic during childbirth and care bears, the isolation of women with signs of septic infection.

Great importance to prevent injuries during childbirth, fighting krovovtratayu and decrease the rate of surgical interventions during childbirth. It is necessary to prevent premature amniotic fluid effusion, timely treat deviations from the physiological course of labor (weakness of delivery), a antibiotic for indications.

3.3. Requirements for the results of work.

1. What is the definition of postpartum infection?

2. What is the definition of «internally hospital (hospital) infection»?

3. What is the classification of postpartum infectious diseases?

4. What is the etiology of postpartum infectious diseases?

5. What is the pathogenesis of postpartum infectious diseases?

6. What are the risk factors of postpartum infectious diseases?

7. Which clinical features and diagnosis of postpartum infected wounds?

8. What are the treatments for postpartum infected wounds?

9. What are the clinical features and diagnosis of postpartum endometritis?

10. What are the treatments for postpartum endometritis?

11. What are the clinical features and diagnosis and treatment of milk fever?

12. What are the treatments for milk fever?

13. What is the modern classification of septic states?

14. What are the basic principles of treatment of obstetric sepsis?

15. What are the clinical features and diagnosis of obstetrical peritonitis?

16. What are the basic principles of treatment of obstetrical peritonitis?

17. What are the clinical forms of infectious thrombosis complications in obstetrics?

18. What are the basic principles of treatment of obstetric thrombosis complications?

19. What anomalies of labor activity do you know?

20. What are the clinical signs of different anomalies of labor activity?

21. What are the methods of diagnostics of different anomalies of labor activity?

22. What are the main principles of treatment of patrimonial disactivity?

3.4. Control materials for the final stage of the class: tasks, tests, etc.

Tests

1. A woman consulted a doctor on the 14th day after labour about sudden pain, hyperemy and induration of the left mammary gland, body temperature rise up to 39oC, headache, indisposition. Objectively: fissure of nipple, enlargement of the left mammary gland, pain on palpation. What pathology would you think about in this case?

A. Lactational mastitis

B. Lacteal cyst with suppuration

C. Fibrous adenoma of the left mammary gland

D. Breast cancer

E. Phlegmon of mammary gland

2. On the tenth day after discharge from the maternity house a 2-year-old patient consulted a doctor about body temperature rise up to 39oC, pain in the right breast. Objectively: the mammary gland is enlarged, there is a hyperemized area in the upper external quadrant, in the same place there is an ill-defined induration, lactostasis, fluctuation is absent. Lymph nodes of the right axillary region are enlarged and painful. What is the most likely diagnosis?

A. Lactational mastitis

B. Abscess

C. Erysipelas

D. Dermatitis

E. Tumour

3. Examination of placenta revealed a defect. An obstetrician performed manual investigation of uterine cavity, uterine massage. Prophylaxis of endometritis in the postpartum period should involve following actions:

A. Antibacterial therapy

B. Instrumental revision of uterine cavity

C. Haemostatic therapy

D. Contracting agents

E. Intrauterine instillation of dioxine

4. On the 10th day postpartum a puerperant woman complains of pain and heaviness in the left mammary gland. Body temperature is 38, 8oC, Ps- 94 bpm. The left mammary gland is edematic, the supero-external quadrant of skin is hyperemic. Fluctuation symptom is absent. The nipples discharge drops of milk when pressed. What is a doctor’s further tactics?

A. Antibiotic therapy, immobilization and expression of breast milk

B. Compress to both mammary glands

C. Inhibition of lactation

D. Physiotherapy

E. Opening of the abscess and drainage of the mammary gland

5. A parturient woman is 27 year old, it was her second labour, delivery was at full-term, normal course. On the 3rd day of postpartum period body temperature is 36, 8oC, heart rate - 72/min, BP - 120/80 mm Hg. Mammary glands are moderately swollen, nipples are clean. Abdomen is soft and painless. Fundus of uterus is 3 fingers below the umbilicus. Lochia are bloody, moderate. What is the most probable diagnosis?

A. Physiological course of postpartum period

B. Subinvolution of uterus

C. Postpartum metroendometritis

D. Remnants of placental tissue after labour

E. Lactostasis

6. Examination of placenta revealed a defect. An obstetrician performed manual investigation

of uterine cavity, uterine massage. Prophylaxis of endometritis in the postpartum period should involve the following actions:

A. Antibacterial therapy

B. Instrumental revision of uterine cavity

C. Haemostatic therapy

D. Contracting agents

E. Intrauterine instillation of dioxine

7. A woman addressed a gynecologist on the 20th day of puerperal period with complaints of pain in the left mammary gland, puruent discharge from the nipple. Objectively: Ps- 120/min., body temperature is 39oC. The leftmammary gland is painful, larger than the right one, the skin there is hyperemic; in the upper quadrant

there is an infiltrate 10x15 cm in size with soft center. Blood test: ESR- 50 mm/hour, leukocytes - 15, 0 · 109/l. What would be the treatment tactics?

A. Transfer to a surgical department for surgical treatment

B. Refer to a gynecology department

C. Refer to a postnatal department

D. Refer to a surgeon for conservative treatment

E. Lance the mammary gland abscess in a maternity department

8. A maternity patient breastfeeding for 1,5 weeks has attended a doctor. She considers the onset of her disease to be when proportional breast engorgement occurred. Mammary glands are painful. Body temperature is 36, 6oC. Expression of breastmilk is hindered. The most likely diagnosis is:

A. Lactostasis

B. Infiltrative mastitis

C. Suppurative mastitis

D. Chronic cystic mastitis

E. Gangrenous mastitis

9. On the 9th day after childbirth the obstetric patient developed high fever up to 38oC. She complains of pain in the right mammary gland. The examination revealed the following: a sharply painful infiltrate can be palpated in the right mammary gland, the skin over the infiltrate is red, subareolar area and nipple are swollen and painful. What is your diagnosis?

A. Abscess of the right mammary gland

B. Mastopathy

C. Cancer of the right mammary gland

D. Serous mastitis

E. Fibrous cystic degeneration of the right mammary gland

10. A woman complains of temperature increase up to 39oC, sharp pains in her lower abdomen, and sanguinopurulent discharge from her genital tracts. From her case history it is known that 6 days ago she underwent illegal abortion. Objectively her blood pressure is 100/60 mm Hg, pulse is 110/min. Abdominal rigidity, rebound tenderness (Bloomberg's sign), and painful palpation of the lower abdomen are observed. On bimanual examination the uterus is enlarged up to 7 weeks of pregnancy, painful, and soft; posterior vaginal fornix overhangs. Make the diagnosis:

A. Pelviperitonitis

B. Endometritis

C. Acute adnexitis

D. Pyosalpinx

E. Metroendometritis

11. A postparturient woman, who has been breastfeeding for 3 weeks, made an appointment with the doctor. For the last 6 days she has been feeling unwell, complains of body temperature of 38-39oC, general weakness; within the last 2 days she developed pain and redness in the area of her right mammary gland. Examination revealed her mammary gland to be significantly enlarged and deformed; breast tissue fluctuations and lymphadenitis are observed. What type of mastitis is the most likely?

A. Phlegmonous mastitis

B. Serous mastitis

C. Infiltrative mastitis

D. Lactostasis

E. Mammary edema

12. A 22-year-old postparturient woman on the 12th day after the normal childbirth informs of elevated body temperature up to 39°C for the last 3 days and pain in her right mammary gland. The right mammary gland is enlarged, hot to touch, tense, hyperemic, and painful. Palpation reveals there a dense infiltration 8x8 cm with a fluctuation in its center. What is the most likely diagnosis?

A. Postpartum period, day 12. Right-sided lactostasis

B. Postpartum period, day 12. Right-sided infilrativ-purulent mastitis

C Postpartum period, day 12. Right-sided gangrenous mastitis

D. Postpartum period, day 12. Right-sided phlegmonous mastitis

E. Postpartum period, day 12. Right-sided serous mastitis

13. On the day 4 after the cesarean section a woman developed fever with body temperature up to 39°C and abdominal pain. Pulse - 104/min. She vomited twice. The patient is sluggish, her tongue is dry and has gray coating. The abdomen is distended. Signs of peritoneal irritation are positive in

all segments. Peristalsis cannot be auscultated. No passage of gas occurs. Uterine fundus is located at the level of the navel. The uterus is painful on palpation. The discharge is moderate and contains blood and pus. What is the most likely diagnosis?

A. Diffuse peritonitis

B. Pelvic peritonitis

C Metroendometritis

D. Progressive thrombophlebitis

E. Parametritis

14. Multypara, 32 y.o., is in the I stage of labor for 5 hours. Light amniotic fluid has flown out 1 hour ago. Signs of clinical disproportion are absent. At internal obstetric examination head of the fetus is pressed to inlet to the small pelvis, fetal bubble is absent. Disclosure of uterine cervix is 2 sm. Choose the optimum labor management?

A. Medicinal dream

B. Labor inducing

C. Cesarean section

D. Treatment of uterine inertia

E. Obstetric forceps

15. Woman-in-labor 25 y.o., is in I stage of duly labor during 14 hours with normal patrimonial activity. Sizes of the pelvis 26-28-30-18 sm. Palpitation of the fetus is dull, rhythmical, 85 b/min. Prospective mass of the fetus 3200.0+200 gr. Internal obstetric examination: disclosure of uterine os is complete, head of the fetus is in pelvic cavity. What is the tactics of labor management?

A. Applying of output obstetric forceps

B. Applying of cavity obstetric forceps

C. Conservative labor

D. Cesarean section

E. Fetus destroying operation

III. SUMMING UP

Current control: oral examination, testing, assessment of practical skills, solving situational clinical problems, assessment of activity in the classroom.

Criteria for current assessment on the practical lesson:

5 The student is fluent in the material, takes an active part in the discussion and solution of situational clinical problems, confidently demonstrates practical skills during the examination of a pregnant and interpretation of clinical, laboratory and instrumental studies, expresses his opinion on the topic, demonstrates clinical thinking.

4 The student is well versed in the material, participates in the discussion and solution of situational clinical problems, demonstrates practical skills during the examination of a pregnant and interpretation of clinical, laboratory and instrumental studies with some errors, expresses his opinion on the topic, demonstrates clinical thinking.

3 The student isn’t well versed in material, insecurely participates in the discussion and solution of a situational clinical problem, demonstrates practical skills during the examination of a pregnant and interpretation of clinical, laboratory and instrumental studies with significant errors.

2 The student isn’t versed in material at all, does not participate in the discussion and solution of the situational clinical problem, does not demonstrate practical skills during the examination of a pregnant and the interpretation of clinical, laboratory and instrumental studies.

RECOMMENDED LITERATURE

Basic:

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