ODESSA NATIONAL MEDICAL UNIVERSITY

Department of urology and nephrology

GUIDELINES of independent work of students

Academic discipline "Urology"

The theme of independent work of students: Modern endoscopic methods for diagnosis and treatment of diseases of the bladder, urethra and prostate

Academic discipline "Urology"

Level of higher education: Second (Master's)

Knowledge field: 22 "Health Care"

Specialty: 222 "Medicine"

Program of professional education: Medicine

Approved methodological meeting on the chair 28. 08. 2023
Protocol № 1
Head. Chair prof. F.I. Kostev

Subject: Modern endoscopic methods for diagnosis and treatment of diseases of the bladder, urethra and prostate - 1 hour.

1. The relevance of the topic.

Hard to imagine the progress of modern science without urological uninterrupted development of endoscopic research techniques that fully represent an effective means of therapeutic influence in many of the most common urological diseases. Over time ендоскопічні receptions in urology research formed the basis of modern techniques developed ендоурологічних operations in diseases передміхурової gland, urethra, bladder, sechovoda. Nowadays, most medical and diagnostic targets in diseases and sexual uric system can be solved ендоскопічними tools that have made significant proliferation and a high level of perfection.

2. Educational goals:

"Know:

- 1. Views and contraindications for TURu;
- 2. Diagnostic methods and therapeutic purposes ендоскопічного study urological patient;
- 3. The role tsistoskopii to determine the source of bleeding at the time gematurii, in identifying the causes of dysuria (stone, tumor, tuberculosis, etc.).
- "Able to:
- 1. Rate tsistoskopii results;
- 2. Alert complications from ендоскопічних interventions.
- 3. Materials to self-classroom training.
- 3.1. Interdisciplinary integration.

№ Disciplines Know Umet

- 1 Normal anatomy anatomical features mochetochnikovyh ways
- 2 Operational уронефрологія perform bladder catheterization on a phantom various types of catheters;
- -- Інтерпритувати different цистоскопічні picture (on phantom and Atlas);
- -- Indications for modern ендоурологічних interventions;
- -- Determine the type and designation means ендоскопічної diagnosis;
- -- Execute bladder catheterization and tsistoskopiyu female patients.

3.2. The content of the topic.

Currently, the main method of treatment DGP remains operational, which is among the many ways the most effective and popular is transuretralnaya resection (TUR) prostate. Thus, according to the American urological association (AUA) for 1992-1996's. From all and invasive surgical interventions at the DGP, TUR performed at 69,2-93,3% of patients.

Successfully developing new methods of treatment DGP, such as modern therapy, hyperthermia, various options thermotherapy, cryotherapy, laser and ultrasound ablatsiya, prostaticheskih use of stents, prostate cylinders dilation and others are under study and, despite a number of advantages (less invasive, the absence of bleeding, simple machines, etc.) have their shortcomings, the limited evidence and giving way on the efficiency and radical treatment of prostate transuretralnoy elektrohirurgii. Thus, TUR prostate now generally is the "gold standard" in treating DGP.

TOUR - this kind of endoscopic elektrohirurgicheskoy operation in which tissue removal (resection) and coagulation of vessels carried out high-frequency electric current through a special endoscopic tools - rezektoskopa conducted on the urethra opening.

History transuretralnoy elektrohirurgii has just over 100 years. Preimage modern rezektoskopa was created and J. M. Stern McCarthy he was in 1926-1930., And since that time Tour has become widely used in treating diseases urethra, prostate and bladder. A great contribution to the development transuretralnoy: elektrohirurgii made scientists and doctors NA Lopatkina, VY

Simonov, A.M. Nyankovsky, LI Dunaevskij, N. Young, J. Blandy, R. Barnes, R. Nesbit, H. Hopkins, H. Reuter, J. Iglesias, W. Mauermayer, R. Hartung, E. Matoushek, etc.

In the Research Institute of Urology MOH Russia (Director - RAMS academician N. A. Lopatkin) in 1982 met with more than 14000 transuretralnyh endoscopical interventions on the various diseases upper and lower urinary tract, including the DGP. Experience confirms a number of clear advantages over traditional open TOUR prostatektomiey (a dekomektomiey): traumatic intervention and reducing the number of complications, reducing the time patients stay in hospital and a rehabilitation period, the restoration of urination in patients with pronounced interkurrentnymi diseases, the possibility of a repetition of interventions without increased risk to the patient , Declining investment validizatsii patients, cosmetic effect, etc.

It should be stressed, however, that TUR prostate - is one of the most complex and jewelry operations across the spectrum transuretralnoy endoscopy, which requires a thorough knowledge of "applied" endoscopic anatomy and perform instrumental skills endoscopical manipulation. Passive surveillance learn transuretralnoy endoscopy impossible - student must be in the hands rezektoskop and training - a special device to monitor the operation (optical "spy" with a video camera or video screen). There was no doubt "that the independent exercise of such operations could begin only after passing a special training course, while considered among specialists that know how to do TUR prostate is possible only after the independent exercise of such interventions 100-200.

INDICATIONS AND PROTIVOPOKAZANIYA

Improved technology and expertise transuretralnoy endoscopy provided a significant improvement testimony to the TOUR with DGP. This has contributed to:

- Creating hard aperture optical systems telescope with high-resolution (Hopkins I, Hopkins II), improves quality pictures and endoscopic surgeon orientation;
- Improved design rezektoskopov, cutting loops and coagulator, as well as elektrohirurgicheskmh (diathermic) plants for resection and coagulation radiotomov;
- Development principles TUR at constant brainwashing and low pressure irrigation fluid in the bladder (the establishment rezektoskopov with the constant washing type Iglesias, special tsistostomicheskih troakarov type Reuter, the use of active aspiration washing liquid during the Tour and others) that, in addition to improving the quality of endoscopic picture was the prevention of a number of complications (such as water intoxication organism the so-called "TOUR syndrome");
- Development and improvement of anatomically sound "devaskulyariziruyuschih" TUR prostate techniques, in which tissue is removed in the initial projection with the passage of large vessels coagulation past, and then carried out practically bloodless removal of the main mass of adenoma. "

Thus, to date indication for prostate TUR is symptomatic DGP any stage of any size and, when open prostatektomiya (adenomektomiya) is dangerous or contraindicated. TOUR preferable to open operations:

- giperplazirovannoy prostate volume less than 60-80 cm³,
- relatively young age of patients who need to preserve sexual function,
- suspected prostate cancer,
- obesity, heavy concomitant cardiovascular diseases, respiratory and endocrine systems,
- associated lower urinary tract diseases, 4 previously carried over operations at the bladder, prostate, anterior abdominal wall, intestine, and after hyperthermia, thermotherapy, and laser treatment DGP.
- "true" and "false" (fabric loop) Relapses disease,
- prolonged conservative (medical) treatment DGP,
- DGP coupled with chronic prostate and prostate stones, etc.

Side effects are limited almost common contraindications to any surgical intervention (extremely severe condition of the patient, acute illness body organs and systems, nekorregiruemye koagulopatii etc.), as well as acute inflammatory diseases of the digestive system and the

conditions under which technically impossible to implement TOUR (anchylosis hip joints, The impossibility of imposing rezektoskopa in the bladder).

3.3. Recommended readings.

- 1 Vozianov AF, tube O. Urology: Textbook 2 ed., Pererobl. and add. D. Dnieper VAL, 2017. 830 p.
- 2. Vozianov SO, Gzhegots'kyi MR, Shulyak OV Petrishin JS, Mysakovets AG, AA Story Urology: textbook Lviv: World 2017, 304 p.
- 3. Pasechnykov SP, Mitchenko M., A. Glebov Ciprofloxacin in the treatment of urinary tract and male genitalia // zdorovja men. 2018 . № 1. S. 128 134. 4. Urology (practical skills for interns). Study guide /ed. by V.P. Stus and S.P. Pasechnikov / Dnipro: LLC «Accent PP», 2017.-282 p.)
- 4. Urology: S.P. Pasechnikov, V.M. Vozianov, V.M. Lesovoy end. By. S.P. Pasechnikov. Vinnytsia: Nova Knyha, 2016. -400p.
- 3.4. Орієнтуюча map for self-directed learning, using literature student from the topic. The specified in the text.
- 3.5. Materials for the self: the test objectives, tasks.

Developers:

Head of Department of Urology and Nephrology, Professor F.I. Kostev, Professor of the Department of Urology and Nephrology Yu.M. Dekhtyar Professor of the Department of Urology and Nephrology M.I. Ukhal Associate Professor of the Department of Urology and Nephrology I.V. Rachok Associate Professor of the Department of Urology and Nephrology L.I. Krasiliuk Associate Professor of the Department of Urology and Nephrology M.V. Shostak Associate Professor of the Department of Urology and Nephrology R.V. Savchuk Assistant Professor of the Department of Urology and Nephrology S.V. Bogatskyi Assistant Professor of the Department of Urology and Nephrology O.M. Kvasha

Recommended literature. Basic:

- 1. S.P. Pasechnikov; Urology: textbook/ Ed. S. P. Pasyechnikova, S. A. Vozianov, V. N. Lesovy [and others]. View. 3rd Vinnytsia: New Book, 2019.
- 2. Pasechnikov S.P. Modern problems of urology: [manual]: doctor's guide/ S.P. Pasechnikov, V.I. Zaitsev. Kyiv: L-ry Health of Ukraine; 2017.
- 3. Stus V.P. Urology (practical skills for intern doctors) / V.P. Stus, S.P. Pasechnikov. Teaching and methodical manual. Dnipropetrovsk: Akcent PP LLC, 2016.
- 4. Sarychev L.P. Symptoms of urological diseases: method. rec. For teachers / L. P. Sarychev, S. M. Suprunenko, S. A. Sukhomlyn, Ya. V. Sarychev. Poltava, 2019.
- 5. O.V., Lyulko, O.F. Vozianov Textbook "Urology" 3rd edition. Thresholds Dnipropetrovsk. 2012 p.
- 6. "Urology (Methodical development of practical classes for students)" edited by Professor V.P. Stus, second edition, supplemented. / A.P. Stus, Moiseinko M.M., Fridberg A.M., Pollion M.Yu., Barannik K.S., Suvaryan A.L., Krasnov V.M., Kryzhanivskyi O.Yu. Dnipro: Accent LLC. 2018. 336c.

- 7. Urology: textbook for students. higher med. academic established: translation from Ukrainian publications / S.P. Pasechnikov, S.A. Vozianov, V.N. Lesovoy, F.I. Kostev, V.P. Stus, et al./ Ed. S.P. Pasechnikov Edition 2. Vinnytsia: Novaya Knyga, 2015. 456 p.: illustr.
- 8. Urology: textbook for students of higher medical education Institutions /S.P. Pasechnikov, S.O. Vozianov, V.M. Lesovoy (et at.); ed. by Pasechnikov. / S.P. Pasechnikov, S.O. Vozianov, V.M. Lesovoy (et at.) Vinnytsia: Nova Knyha, 2016. 400 p.
- 9. EAU Guidelines, edition presented at the 28th EAU Annual Congress, Milan 2021. ISBN 978-90-79754-71-7. EAU Guidelines Office, Arnhem, The Netherlands.
- 10. Alan W. Partin, Alan J. Wein, et. all Campbell Walsh Wein Urology, E-Book (12th ed.) 2020.
- 11. Omar M. Aboumarzouk Blandy's Urology, 3rd Edition 2019.
- 12. David Thurtle, Suzanne Biers, Michal Sut, James Armitage. Emergencies in Urology 2017. 4. Philipp Dahm, Roger Dmochowski Evidence-based Urology, 2nd Edition 2018.

Additional:

- 1. Boyko M.I., Pasechnikov S.P., Stus V.P. and others Clinical andrology // Doctor's guide "Androlog". K.: LLC "Library "Health of Ukraine", 2013. 222 p.
- 2. Sarychev L.P. Clinical anatomy and physiology of organs of the urinary and male reproductive system: method. rec. for teachers / comp. L. P. Sarychev, S. A. Sukhomlyn, S. M. Suprunenko. Poltava, 2019. 11 p.
- 3. Sarychev L.P. Symptoms of urological diseases: method. rec. for teachers / L. P. Sarychev, S. M. Suprunenko, S. A. Sukhomlyn, Ya. V. Sarychev. Poltava, 2019. 14 p.
- 4. Medical student's library. Urology. Edited by F.I. Kosteva. Odesa, 2004. 296p.
- 5. Atlas-guide to urology. Ed. A.F. Vozianova, A.V. Lulko Dnipropetrovsk, 2002.-T. 1,2,3
- 6. Urology / Ed. Prof. O.S. Fedoruk Chernivtsi: Bukovyna State Medical University, 2011. 344p.

Information resources:

University website https://onmedu.edu.ua

Library library.odmu.edu.ua

- 1. https://uroweb.org/
- 2. https://www.nccn.org/
- 3. https://www.auanet.org
- 4.https://www.inurol.kiev.ua/
- 5. https://www.souu.org.ua/