Material and methods: From September 2014, 512 men with azoospermia were consulted and 325 cases TESA were done in 6 different IVF centers in Tbilisi. But only cases with NOA were included in our retrospective review, 288 cases of TESA – mean age 29.8 years, mean serum FSH was 16.47 mU/ml (range 0.2–102.51 mU/ml). In 7 cases Klinefelter syndrome was detected, with mean serum FSH level 48 mU/ml (range 20.6–102.51 mU/ml).
The main method of testicular sperm extraction was percutaneous testicular sperm aspiration (TESA) with 19 G "butterfly" needle and vacuum applied with 10 ml medium in syringe. Procedure was done under general sedation. Multiple passes were performed in random way throughout the testis (uni or bilaterally) until tissue was visible in needle tube. The specimen is split and send in media for live sperm analysis by embryologist.
Results: Sperm retrieval rate (SRR) was 44%. According serum FSH levels we divided our men in three groups: FSH < 10 mU/ml, 10–15 mU/ml and >15 mU/ml. In men with FSH < 10 mU/ml SRR was 56%, in which FSH was 10–15 mU/ml SRR was 25% and finally SRR was 35% when FSH was >15 mU/ml (p wasn't statistically significant). According to these nonconclusive results we make embryologist personal assessment (EPA). In our pilot EPA we cover only one month – 2019 May, during this month 11 TESA for NOA were done – SRR was 37%. We compare this data with SRR results when tissue assessment was done by one embryologist (EMGT – chief embryologist of Zhordania Clinic IVF laboratory) – SRR was 76%. This data is quite comparable to micro – TESE results.
Conclusions: Micro – TESE is proposed as a "gold standard" for successful sperm retrieval rate, sure in some difficult case it's best option. But in our pilot EPA study we try to show embryologist crucial role in tissue assessment after TESA.

GUA-27 Inhibin B as a marker of success after varicocelectomy in severe oligospermia

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Introduction and objective: Severe oligospermia is a dramatic reason of male infertility. Sometimes we see it in conjunction with varicocele. The aim of our study was to assess the role of varicocelectomy in such cohort of patients and to find the predictive markers of spermatogenesis improvement.
Material and methods: We select 37 infertile men (mean age 30.7 years) with left side varicocele grade II–III and severe oligospermia (sperm concentration<5 M/ml). Study exclusion criteria were: abnormal karyotype, hypergonadotropichypogonadism (especially highly elevated FSH, more then 14 ME/ml), abnormal testicular volume according ultrasonography. At the same time in all these patients we checked the level of Inhibin B in serum, as a hypothetic predictive marker, which ranged from <10–203.77 ng/l (normal range 25.0–325.0 ng/l).
In all patients left subinguinalvaricocelectomy was done, control semen analysis was assessed after 12 months.
Results: Baseline semen analysis changed from 2.47 M/ml (range 1.23–4.75 M/ml) till 4.37 M/ml (range 1.02–9, 57 M/ml) (p = 0.07). Statistically significant improvement in semen analysis was achieved only in group of 14 patients – from 3.17 M/ml (range 2.37–4.75 M/ml) till 6.84 M/ml (range 3.89–9.57 M/ml) (p = 0.0001). Surprisingly all these men had higher levels of Inhibin B >95 ng/l. In this group, after 12 months the average level of Inhibin B in serum increased till 143 ng/ml (baseline level 129 ng/ml). In men with low Inhibin B level (<95 ng/l) we didn't find significant improvement in sperm count and Inhibin B level.
Conclusions: The role of varicocelectomy in severe oligospermiain the era of IVF is still controversial. As we can see, despite the small number of recruited patients (because of strict inclusion criteria), semen improvement after varicocelectomy is limited. Inhibin B can be used as a predictive marker of spermatogenesis improvement, even as a Sertoly cells reserve marker in such cohort of patients. We are planning to continue our study and after these primary endpoints we will start to perform testicular morphology to try to explain our results.

GUA-28 Nebivolol plus sildenafil in PDE 5 inhibitors non-responder men with arterial hypertension

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Introduction and objective: PDE 5 inhibitors are the first-line therapy for erectile dysfunction (ED). Demonstrated efficacy is variable with different possible mechanisms in non-responders' cases. The main reason is related to the defect in NO/cGMP pathway.
Nebivolol (selective beta – blocker with NO-mediated vasodilator properties) may be a chance for PDE 5 inhibitors non-responders.
Materials and methods: We recruited 47 men with arterial hypertension (mean age 44.7 years) non-responders to sildenafil (exclusion criteria were hipogonadism, severe dyslipidemia, diabetes mellitus). ED was assessed according International Index of Erectile Function 15 (IIEF – 15) score (baseline and after 3 months).
Results: Baseline IIEF – 15 score mean level was 29.56. After combination treatment with sildenafil 100 mg on demand and Nebivolol 5–10 mg IIEF – 15 score was re-assessed, mean level became 50.34 (difference statistically significant p < 0.0001).
Conclusion: Arterial hypertension is negative risk factor for penile vascularity. So, Nebivolol significantly enhance the capacity of PDF 5 inhibitors to relax erectile tissue and allow penile erection.
In some cases, it is a good opportunity combination of nebivolol with sildenafil to avoid necessity of intracavernosal injections.

GUA-29 "Salvage" sling after obstructive sling cutting

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Introduction and objective: Postoperative voiding dysfunction (VD) is a potential complication of sling procedures. Reported rates of urethral obstruction range from 5% to 20%. Reoperation rates relating to tape revision for postoperative voiding dysfunction ranged from 1.6% to 2.4% (both for retropubic or transobturator tapes). Recurrence of stress urinary incontinence (SUI) after tape release remains an open issue and at present time there is no consensus about management of tape release.
Material and methods: From 2006 till 2019 years by same surgeon (A. Kh.) were operated 18 women (mean age 56.74 years) with obstructive voiding after stress urinary incontinence surgery – in all cases transobturator tape was inserted in other clinics. Postoperative time in all cases was more than 3 months. According to urofloumetry obstructive voiding curve was detected in all women, with Qave 8.9 ml/s (range 5.6–12.9 ml/s). Post void residual was between 50 and 210 ml.
Results: In all cases, in lithotomy position, anterior vaginal wall midline incision was done. After surgical revision, previous midurethral sling (MUS) was cutted, suburethral parts laterally in the direction of obturator membrane was removed. To prevent recurrent SUIconcomitant procedure was performed at the same time – new retropubicmidurethral tape.

After 6 months of follow up according to 1-hour pad test only in 2 cases leakage were >10 g. Postoperative urinary retention was only in 1 case and was managed by tape "pull down" with Gegar dilatator in urethra (in 24 hours after operation) with good final results. Vaginal extrusion of sling was found in 1 case after 1 month of operation (wound area). Wound was closed successfully without tape cutting or removal. Functional Results Qave18.9 ml/s (range 11.6–22.9 ml/s), no post void residual.
Conclusions: When surgical revision of MUS is undertaken, there is no clear evidence to favor either incision or excision with regard to relief of VD, or the risk of de-novo SUI recurrence. Professional experience and patient's clinical status should guide decisions. Our series of this complicated cases show that "salvage" sling after obstructive sling cutting had good functional results. We try to show that so-called "salvage" sling can avoid re-operation (third operation in mid-urethra part) for de-novo SUI after obstructive sling cutting.

GUA-30 Skene's gland duct cysts: our experience

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Introduction and Objective: Skene's glands or periurethral glands are branched, tubular glands that are adjacent to the distal urethra. Skene's glands are the largest of the paraurethral glands, however many smaller glands empty into the urethra. Most cases are acquired as a result from repeated infections and obstruction of the periurethral glands. Ductal obstruction leads to formation of suburethral cysts or abscesses that may rupture into urethral lumen and lead to urethral diverticulum formation.
Material and methods: In our study we included 32 cases operated in our center from 2010 year. Clinical presentations were presented with multiple symptoms: palpable or visible mass at the introitus, pain, dyspareunia, dysuria, a distorted voiding stream and a vaginal discharge. It should be mentioned that periurethral cysts may be totally asymptomatic and discovered during routine pelvic examination. Palpation of this mass may result in a purulent discharge from the external urethral meatus but this "classic" sign was only present in 30% of cases. Transvaginal ultrasound/translabial ultrasound has excellent sensitivity and anatomic delineation and was useful for investigation. The size (in our series up to 4 cm), number, location, structure, content and wall thickness may be obtained but the disadvantage that the probe may directly compress the urethra, so translabial approach was option.
Results: All 32 cases were operated, we didn't perform as so called marsupialisation (an incision through the cyst/diverticulum to its urethral orifice). So, we prefer complete excision of cyst. In lithotomy position, an inverted U shape incision of well vascularised anterior vaginal wall, flap was mobilized towards the bladder neck. In cases of "parameatal" lesions longitudinal incision was done. Complete excision of the cyst wall should be done. In the presence of urethral diverticulum neck (40% of cases in our series, which half were detected during operation), resultant large urethral defect should be repaired in a multi-layered non-overlapping closure with absorbable sutures. Only in one case with urethral orifice diameter about 1.5 cm was done tissue interposition with the Martius graft from left labia. In cases with urethral reconstruction Foley's catheter was left for 7–10 days, in other cases for 48 hours. No major complications in post-operative follow up.
Conclusions: The diagnosis of female periurethral cystic lesions is challenging for clinicians because patients present with nonspecific signs and symptoms. Sometimes final diagnosis was done at the time of operation; we think it is mandatory to avoid missing of cystic lesions connection with urethral lumen.

GUA-31 Peculiarities of operative intervention at stones of the distal ureter

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Background: Often, calculi of the ureter are located in its terminal section and are the cause of significant dilatation of the urinary tract. However, the presence of a stone in the lumen of the ureter for a long time leads to a pathological change in the ureter wall and inflammation (with subsequent formation of gross scars) in the surrounding tissues. Such a condition requires not only stone removal, but also reconstructive surgery of the ureterovesical joint. We have retrospectively reviewed of the results of surgical treatment of patients with stones located in the distal ureter was performed, depending on the duration of the disease.
Methods: For the period from January 2010 to December 2018, surgical intervention was examined and performed for calculi of the distal ureter in 87 patients. The average age of the patients was 34.7 ± 9.5 years (18 to 56 years). There were 65 men (74%), 22 women (26%). All patients underwent: urinalysis (bacteriological examination of urine was performed in the presence of bacteriuria), biochemical and clinical blood tests; urinary tract ultrasonography. To determine the size and location of the stone, an overview and intravenous excretory urography was performed (in order to determine the functional state of the kidneys). The average stone size was 2.3 ± 0.4 cm. The calculi in the left ureter were 78 (89%), and in the right ureter 9 (11%).
Results: All patients had access to the ureter using a suprapubic incision according to Pfanenstil, suggesting the likelihood of reconstructive surgery on the ureter. Ureterolithotomy was performed through an incision of the ureter wall performed proximal to the location of the stone in 76 (87%) patients. It should be noted that the duration of the disease in this group of patients averaged 6.4 ± 0.3 months. During the audit of the ureter in 11 (13%) cases, it turned out that its wall was significantly thickened and densified, there was a significant scar process in the tissues surrounding it. After stone removal during revision, a narrowing of the intramural ureter and ureterovesical anastomosis was revealed, while a 4 Ch catheter could not be passed through their lumen. These patients underwent neoimplantation of the ureter into the bladder with antireflux protection according to Politano-Leadbetter. Ureteric stent was used to decompress the upper urinary tract. The duration of the disease in this group of patients averaged 12.4 ± 0.3 months.
Conclusions: Prolonged presence of a stone in the distal ureter can lead to fibrous in the ureterovesical connection, which is the cause of supravesical obstruction. When planning ureterolithotomy in patients with calculi of the distal ureter, it is advisable to use online access to perform not only stone removal, but also, if necessary, reconstructive surgery to restore the passage of urine.

GUA-32 Laparoscopic en bloc extended pelvic lymph node dissection in prostate cancer

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Background: Extended pelvic lymph node dissection (ePLND) is indicated in patients with intermediate- and high-risk prostate cancer.