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.