

COLLAGEN AGAINST VAGINAL WALL EROSIONS AFTER MESH SURGERY.

Hypothesis / aims of study

Vaginal mucosa erosion is one of the serious problem because of which surgeons refuse to perform mesh-surgery at young women. According to results of different researchers frequency of erosions after mesh-placement surgery is above 15-30 %. Significant factors for POP surgery complications: inadequate preoperative diagnostics and unreasonably total replaceable correction, concomitant hysterectomy, deep dissection, pathological hemorrhage, excessive vaginal mucous section and excision, wrong mesh choice (quality, size, form), implant shrinkage. When some surgeons oppose using mesh in young women the first thing they consider is high risk of postoperative dyspareunia.

The most important thing is to use the differentiated approach of the POP treatment and differentiated approach of the POP treatment and an establishment of preventive ways to improvement increasing the quality of life of patients after surgical treatment.

Study design, materials and methods We've stored initial experience in strong biological graft use – cattle type I collagen membrane Collost™ (n=7) to prevent mesh-shrinking and erosion. In anterior correction (POPQ 3) we use paravaginal repair with Collost™. In posterior TVM-correction (POPQ 3) we put Collost™ 1.5 mm thickness on the mesh [image 1], under fascia (in 4 cases). To treating erosion of the vaginal wall after previous TVM surgery of the POP we used collagen gel 7%-injections [image 2] in 5 cases (in the apical and anterior wall).

Results

In posterior part reconstruction to prevent shrinkage we cut implant's distal part in swallow's tail manner with sleeves placement behind levator ani bilateral. To limit mucous section we make tunnel [image 3] for mesh under recto-vaginal fascia after transverse distal incision which avoid incision of the vaginal wall and as a result we have a relatively low dyspareunia rate. In erosions quantity reduction we use extra-light mesh with pores diameter less than 70 micron. After mesh placement we put the Collost™ membrane 1.5 mm thickness above the prosthesis to straighten this part of mesh to prevent shrinking and erosion. In anterior correction (POPQ 3) we use paravaginal repair with Collost™. We have vaginal mucous erosion successful treatment experience after laparoscopic mesh sacrocolpopexy at patient with POPQ IV vault prolapse. 6 cm erosion healing occurred after 6 Collost-gel 7%™-injections [image 4 a,b]. Now we are treating all mesh erosions with collagen-gel submucosal.

Interpretation of results

There were 5 successful treating of the vaginal erosion using our method during 2 years. No complications in short-term observe. We were inspired by the treatment and at the moment we are doing some more research in this direction.

Concluding message

Biological graft helps us to prevent mesh-complications such as erosion and shrinking. First experiences using collagen gel-injections allows to hope for improvement of erosions managements after mesh-surgery of the POP treatment.

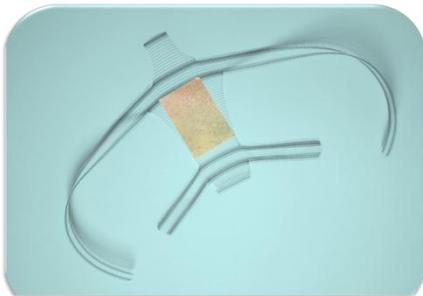


Image1. Ultra-light mesh with Collagen-membrane Collost (Russia) on it.



Image 2. Collagen-gel Collost 7% (Russia).

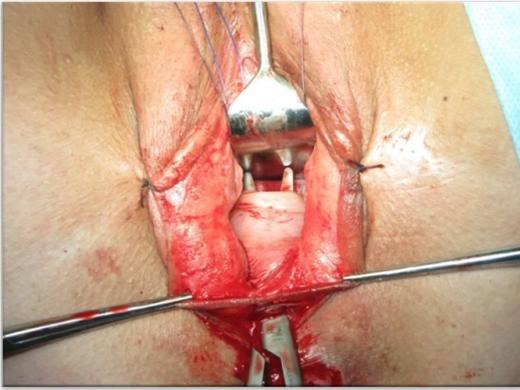


Image 3. "Tunneling" of the vaginal wall to prevent mesh shrinking,

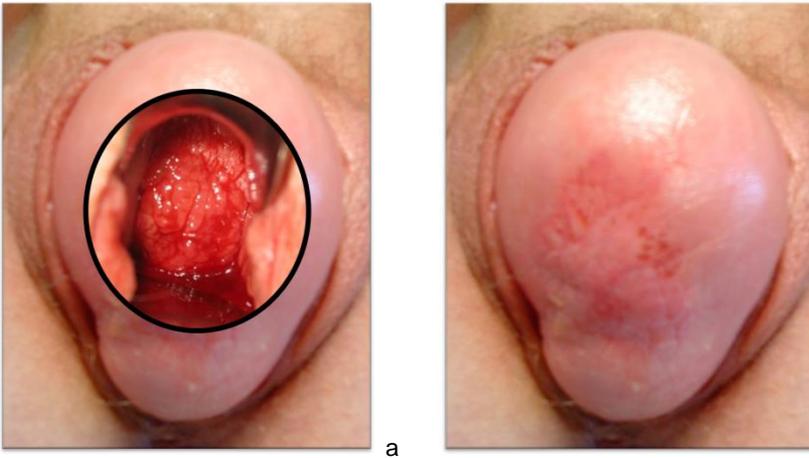


Image 4. Vaginal wall before (a) and after collagen-gel injections after 6 month (b).

References

1. Oleg Shalaev
2. Tatyana Ignatenko
3. Sofya Parsadanyan

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| Specify source of funding or grant | grant |
| Is this a clinical trial? | Yes |
| Is this study registered in a public clinical trials registry? | No |
| Is this a Randomised Controlled Trial (RCT)? | Yes |
| What were the subjects in the study? | HUMAN |
| Was this study approved by an ethics committee? | Yes |
| Specify Name of Ethics Committee | COLLAGEN AGAINST VAGINAL WALL EROSIONS AFTER MESH SURGERY. |
| Was the Declaration of Helsinki followed? | Yes |
| Was informed consent obtained from the patients? | Yes |