DO WE PERFORM SURGERY UPON UNCOMPlicated UTERINE FIBROMA?

**INTRODUCTION**

The uterine fibroma is the most common gynecological pathology, including women at reproductive age. 20% of women aged over 35 years present myoma (G. Robert, L. Palmer).

The most common complications of uterine fibroma which can be surgically solved, are:
- Haemorrhage
- Tumor’s volume or its fast growing
- Compression
- Pain
- Simultaneously malignance suspicion

The uterine factor is involved in sterility/infertility in, apparently, few cases. After Papiernik, the uterine fibroma is rarely considered a cause of sterility (1.8%). The uterine factors block the pregnancy rather than conception.

After American authors (Novak-1999) the uterine abnormalities are placed on the 5th position on infertility factor’s scale. The others factors involved are:

**SUMMARY:**

This paper underlines the importance of uterine pathology as a factor of female infertility. In our studied group from University Clinic of Obstetrics and Gynecology “Bega” Timisoara, over a period of 10 years (1995-2004), we have investigated a number of 3416 patients with infertility. At these women surgical interventions (conventional and laparoscopic surgery) have been performed in order to obtain pregnancy – normal or with the help of assisted procedures.

At these patients we performed 5770 types of conventional surgery procedures and laparoscopic interventions.

Excision of myoma during conventional surgery was performed in 40% of cases of open surgery.

Laparoscopic myomectomy represented a percent of 10% from the total number of our laparoscopic surgery.

The treatment of uterine causes must be reconsidered in the therapy of infertility due to the evolution of technical procedures in assisted reproduction.

**Keywords:** myomectomy, infertility, laparoscopic and conventional surgery

**RESUMAT:**

Articolul subliniază importanța patologiei uterine ca factor de sterilitate feminină. O analiză a cazurilor din Clinica Obstetrică-Ginecologie „Bega”, cu sterilitate, pe o perioadă de 10 ani (1995-2004), a arătat că un număr de 3416 pacienți au fost supuși unor intervenții chirurgicale laparoscopic sau clasice, înainte de obținerea naturale a sarcinii sau prin metode de reproducere umană asistată.

La aceste pacienți s-au realizat 5770 tipuri de operații clasice și laparoscopic. Miomectomia și miomectromia clasice au reprezentat peste 40% dintre tipurile de intervenții prin chirurgie deschisă. Miomectomia endoscopică a reprezentat 10% din totalul tipurilor de intervenție prin laparoscopie.

Abordarea patologiei uterine trebuie reconsiderată în tratamentul sterilității/infertilității, odată cu progresul tehnicilor de reproducere asistată.

**OPERĂM FIBROMUL UTERIN NECOMPLICAT?**

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- male factors
- ovulation factors
- tubal/perithoneum factors
- cervical pathology

There are 5 arguments involved in explaining fibroma pathology implied in human reproduction, which request a study:
1. The number of cases of sterility/infertility is larger and the technical possibilities to establish a diagnosis are growing.
2. The age of women is growing as the social-economic status rise, and the Human Assisted Reproduction techniques are developing. The incidence of myoma in women over 35 is up to 30% after American authors, specialized in ultrasound (S. I. Bill Yee, G. F. Rosen, D. L. Cassidenti)
3. The actual investigation techniques in sterility/infertility show that fibromas can occur without clinical or symptomatic expression.
4. The uterine fibroma can be associated frequently with other causes of sterility/infertility, which can influence the outcome of pregnancy.
5. The surgical treatment (miomectomy, miometrectomy) is more efficient than the treatment with GnRH analogues.

**PHYSIOPATHOLOGY CONSIDERATIONS UPON MYOMA-INFERTILITY RELATION**

The uterus with fibroma presents contractility problems induced by prostaglandins from seminal liquid (Pap)

<table>
<thead>
<tr>
<th>NO</th>
<th>TYPE OF LAPAROSCOPIC SURGERY</th>
<th>NO OF INTERVENTIONS</th>
<th>PERCENT (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Removal of pelvic diffuse endometriosis focal points</td>
<td>288</td>
<td>5.2</td>
</tr>
<tr>
<td>2</td>
<td>Myomectomies</td>
<td>566</td>
<td>10.2</td>
</tr>
<tr>
<td>3</td>
<td>Neostomies</td>
<td>507</td>
<td>9.2</td>
</tr>
<tr>
<td>4</td>
<td>Ovary biopsies</td>
<td>228</td>
<td>4.1</td>
</tr>
<tr>
<td>5</td>
<td>Ovarian decortication</td>
<td>1840</td>
<td>33.3</td>
</tr>
<tr>
<td>6</td>
<td>Adhesion lysis</td>
<td>1002</td>
<td>18.1</td>
</tr>
<tr>
<td>7</td>
<td>Salpingectomies</td>
<td>235</td>
<td>4.3</td>
</tr>
<tr>
<td>8</td>
<td>Punctioning of ovarian cysts</td>
<td>181</td>
<td>3.2</td>
</tr>
<tr>
<td>9</td>
<td>Cystectomies (including endometrial cysts)</td>
<td>452</td>
<td>8.2</td>
</tr>
<tr>
<td>10</td>
<td>Partial ovary resections</td>
<td>230</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Large fibroma can enlarge the uterine cavity, move and torsion the uterus and increase the passage space of sperms. Fibromas placed in uterine horns might determine tubal obstruction.

Fibromas can induce tubal irritation which can lead to improper oocytes transportation. Due to this fact, the embryos reach the uterine cavity unsynchronized with the endometrium development.

Abnormal bleeding, due to the presence of fibromas might disturbed the normal evolution of endometrium towards implantation.

Submucosal uterine fibroma induces trophic alteration of endometrium, with low local hormonal receptivity. The chances of normal nidation decrease. The myoma acts as an intrauterine device. The pediculate submucosal fibroma might produce severe problems to conception: cervical morphology alteration, cervical mucus modifications, maintenance of infections, vaginal biology problems.

Fibroma’s anato-mopathological evolution towards ischemic edematous degeneration, necrosis leads to dystrophic and inflammatory lesions into the endometrium.

Fibroma might determine abortion by:
- Increased uterine contractility associated with circulatory problems, vicious insertion of placenta.
- Arrested developmental embryos are due to insufficient nutrition compression of fibroma misslocation of uterus.
MATERIAL AND METHOD

3228 LSK have been performed in Timisoara, Clinic of Obstetrics and Gynecology Bega between 1995-2004 on patients with primary or secondary sterility.

5529 surgical interventions have been performed as follows. (Table 1)

566 myomectomies represents 10.2% from the total of LSK techniques

188 patients have been submitted to classic surgery for sterility.

241 interventions have been performed as follows (table 2):

Surgical techniques used:
1 LSK miomectomy
2 abdominal miomectomy
3 abdominal miometrectomy

The choice of surgical technique used has been made taking in consideration the specific advantages and disadvantages of each case.

Some classic interventions for myomas have been performed after laparoscopic intervention.

The uterine reconstruction after the classic miomectomy or miometrectomy has been made using separated or inverted threads of catgut.

RESULTS

During almost 10 years of this study, 12 caesarian sections have been made to avoid uterine rupture after mio/miometrectomy scars.

The pregnant women were between 27 to 40 years old.

New borns weighted between 2900-3900 g and Apgar Index was between 9 to 10.

During surgery, there was no suture’s dehiscence.

Adherent post-surgery syndrome was reduced and the Caesarian section (segmento-transverse) was easy to performe.

<table>
<thead>
<tr>
<th>NO</th>
<th>TYPE OF CLASSIC SURGERY</th>
<th>NO OF INTERVENTIONS</th>
<th>PERCENT (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Myomectomy</td>
<td>70</td>
<td>29.1</td>
</tr>
<tr>
<td>2</td>
<td>Myometrectomy</td>
<td>29</td>
<td>12.0</td>
</tr>
<tr>
<td>3</td>
<td>Partial ovary resections</td>
<td>27</td>
<td>11.2</td>
</tr>
<tr>
<td>4</td>
<td>Neostomy</td>
<td>15</td>
<td>6.2</td>
</tr>
<tr>
<td>5</td>
<td>Cystectomies</td>
<td>20</td>
<td>8.3</td>
</tr>
<tr>
<td>6</td>
<td>Ablation of endometrial focal points</td>
<td>10</td>
<td>4.2</td>
</tr>
<tr>
<td>7</td>
<td>Correction of uterine malpositioning</td>
<td>9</td>
<td>3.7</td>
</tr>
<tr>
<td>8</td>
<td>Adnexectomy + salpingectomy</td>
<td>26</td>
<td>10.8</td>
</tr>
<tr>
<td>9</td>
<td>Uterine-tubal reimplantation</td>
<td>9</td>
<td>3.7</td>
</tr>
<tr>
<td>10</td>
<td>Other surgeries (ovarian decortication, himenctomies, Cotte surgery)</td>
<td>26</td>
<td>10.8</td>
</tr>
</tbody>
</table>

All cases had well post-operative evolution.

CONCLUSIONS

1. active surgical attitude in uterine fibroma cases, associated with sterility/infertility is necessary, taking in consideration the age of the patients.

2. association of fibroma in a large number of cases with other infertility factors allows to solve all this factors during the same intervention. (adherention lisis, ovarian decortications, electrocoagulation of pelvic endometriosis, s.o.)

3. the surgical techniques used are efficient and without major complications.

4. the complexity and the price of human assisted reproduction techniques implies a preventive attitude to increase the efficiency of this techniques (to remove all the factors which can influence the outcome in a negative way).
REFERENCES