Should a 10cm fibroid be removed laparoscopically or by laparotomy

Laparotomy .......Peter Maher
Purpose of the debate

• Laparoscopy v. laparotomy
• Concept of “mine’s bigger than yours”
• Should we do it at all?
• Will we inadvertently morsellate a LMS?
• I’m not sure!
Atlee (USA) 1845
First Myomectomy
Removal of a fibrous tumour of the uterus
Amer J Med Sci (1845);11:309-35
Since cure without deformity or loss of function must ever be surgery’s highest ideal, the general proposition that myomectomy is a greater surgical achievement than hysterectomy is incontestable.

Victor Bonney
Consider the old adage…

“If it ain’t broke don’t fix it!!”
Uterine myomas have been quoted as the most common tumours of women in the reproductive age (20-77%)  

Graves 1933, Cramer et al, 1990
Cramer and Patel, 1990
Amer. J. Clin. Path

- 2mm. serial sections 100 hyst. specimens
- Patients pre- and postmenopausal
- Exam @ 2mm. levels tripled the pick-up cf. routine pathology
- Pre- and postmenopausal group same
- CONCLUSION: if the incidence is based on routine pathology alone then the incidence will be grossly understated.
Social impact of Myomas

- In Australia 21.7% hysterectomies for fibroids (incidence hysterectomy 4/1000 women)
- In USA, 27% for fibroids (600,000 hysts./year)
- Finland, 50% for fibroids (incidence 3.9/1000)
Treatment of fibroids when considered necessary

- Individualised based on:
  - Symptoms
  - Size and location
  - Age/fertility desire
  - Availability of therapy
  - Ability of the therapist
The majority of fibroids are asymptomatic and require no treatment
Why remove myomas at all? -most quoted indications

• 1) Menorrhagia

• 2) Infertility
  • 3) Recurrent pregnancy loss
  • 4) Pregnancy complications
  • 5) Pressure symptoms
  • 6) Suspected neoplastic change
Menorrhagia and fibroids - close relationship particularly related to s/m fibroids but a poorly understood.
Incidence of myomas in infertile women without any other cause for infertility~1-2.4%

Buttram, Reiter, 1981, Verhauf 1992
The relationship between the presence of fibroids and infertility is, to say the least, controversial.
The Questions are:
Do women who have fibroids have decreased fertility?
If a woman is infertile, is there a direct link between the presence of fibroids and her infertility?
Should they be removed?
What are the possible mechanisms leading to infertility when fibroids are present?

• Anatomical position-submucosal cf. others
• Dysfunctional muscle contractility-> interference with sperm & ovum transport, implantation. (Vollenhoven et al,1996)
• Focal endometrial vascular abnormalities, inflammation, secretion of vaso-active substances or ↑ androgen enviroment (Buttram,Reiter,1981,Delegdish et al.,1970)
Infertility—How?
More theories.

- ?anovulation (Miller, 1955, Med. J. O&G)
- ?interfering with sperm transport or interfering with sperm capture due to cervical distortion with fibroids (Hunt & Wallach, 1974)
- Cornual myomas ➤distortion of Fallopian tube (Gardner & Shaw, 1989)
- Ulceration of endometrium, ↑ in myometrial activity (Garcia & Tureck, 1984, Huszar & Walsh, 1989)
- Vascular changes ➤↓ blood flow to fibroids and surrounding tissues (Forsmann, 1996, Acta O&G Scand.)
Some agreement, some conflict

- Fibroids < 7cm., no cavity distortion, no difference in PR at IVF (39 v. 34%) Ramzy et al. 1998, Jun et al. 2001
- Retrospective case controlled study, fibroids but no cavity distortion, IVF rates the same (Surrey et al, 2001)
- These results in contradiction to the Monash results (D. Healy et al)
• Surgical treatment of fibroids for subfertility (Metwally et al.) Insufficient evidence from RCTs to evaluate the role of myomectomy to improve fertility
Risk of morsellation?
Do we avoid it with laparotomy
What comprises a mini-laparotomy?

5.5cm
9cm. fibroid through 5.5 cm. incision
LMS
A storm in a tea cup or a reality?
Risk as yet undetermined but quoted anywhere between 1/400 to 1/4000 (meta-analysis Europe)
Offer any patient <1/1000 chance of a serious complication and she will have any operation if it is justified
One can draw a ridiculous conclusion from this discussion: Any women with a fibroid, in reality, has the same risk of malignancy therefore any “sensible thinking person” would opt for a NO TOUCH hysterectomy to avoid the possibility of malignancy!!!!
This ‘problem’ is not new. Having recently read every copy of the now defunct journal ‘Gynaecological Endoscopy’ there were several reports (that is what this is, a case report) of undiagnosed cancers following routine gynaecological operations.
Scientific research and outcomes have always been the basis of management in medicine, not case reports and it is almost impossible to get a case report published in a scientific journal of any standing (as judged by the impact factor).
Guidelines
Laparoscopy or laparotomy?

• Get the indications right!!
• Size does matter BUT so does position!
• Make sure you know the desired outcome!
• Make sure you can do the operation either open or closed!
• Discuss options and be honest with your patient and honest with yourself.
• THERE IS NO RIGHT WAY OR WRONG WAY!!!!!!
I think the answer is hidden!!