

UTERINE FIBROMA: the endovascular point of view

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Learning objectives

The purpose of this poster consisted of explaining the interventional radiologist point of view on uterine fibroids embolization.

Uterine fibroids cause heavy prolonged bleeding, pain, pressure symptoms and subfertility. The traditional method of treatment has been surgery as medical therapies have not proven effective. Uterine artery embolization has been reported to be an effective and safe alternative to treat fibroids in women not desiring future fertility.

Endovascular embolization could be an alternative treatment to hysterectomy and myomectomy.

Thanks to an accurate selection of Patients and through clinical and instrumental controls, endovascular embolization has a good clinical efficacy of short, medium and long-term processes. Low incidence of complications and low treatment failure.

Background

Uterine arteries embolization is a well tolerated procedure, safe and highly effective in the treatment uterine fibroids. Fibroids embolization is normally associated with collateral effects occurrence such as pelvic pain, (intensity is variable: usually severe immediately after embolization), fever ($> 38^{\circ} \text{C}$), nausea and vomiting.

Images for this section:

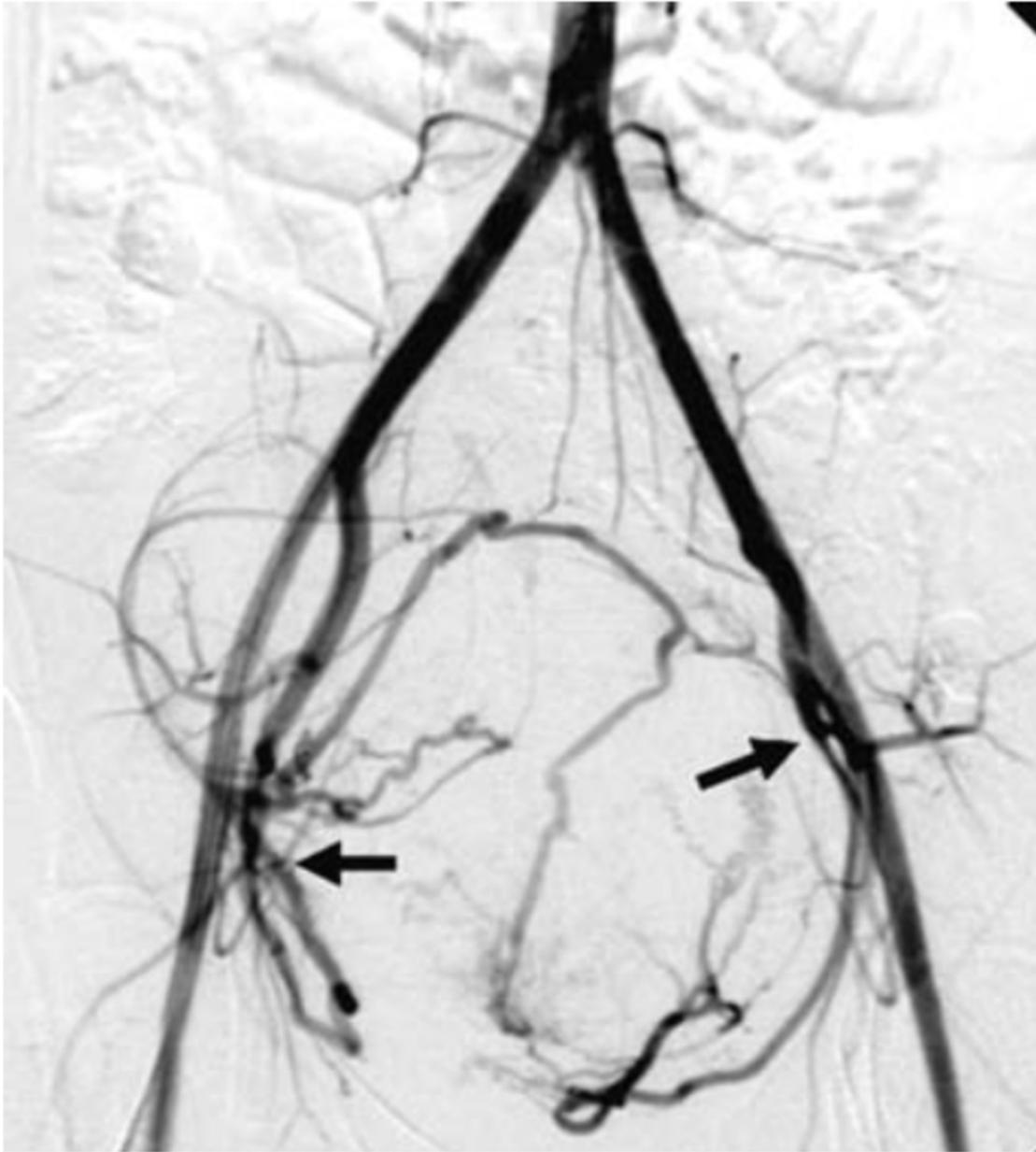


Fig. 3: Pelvic arteriogram shows bilateral hypertrophied uterine arteries

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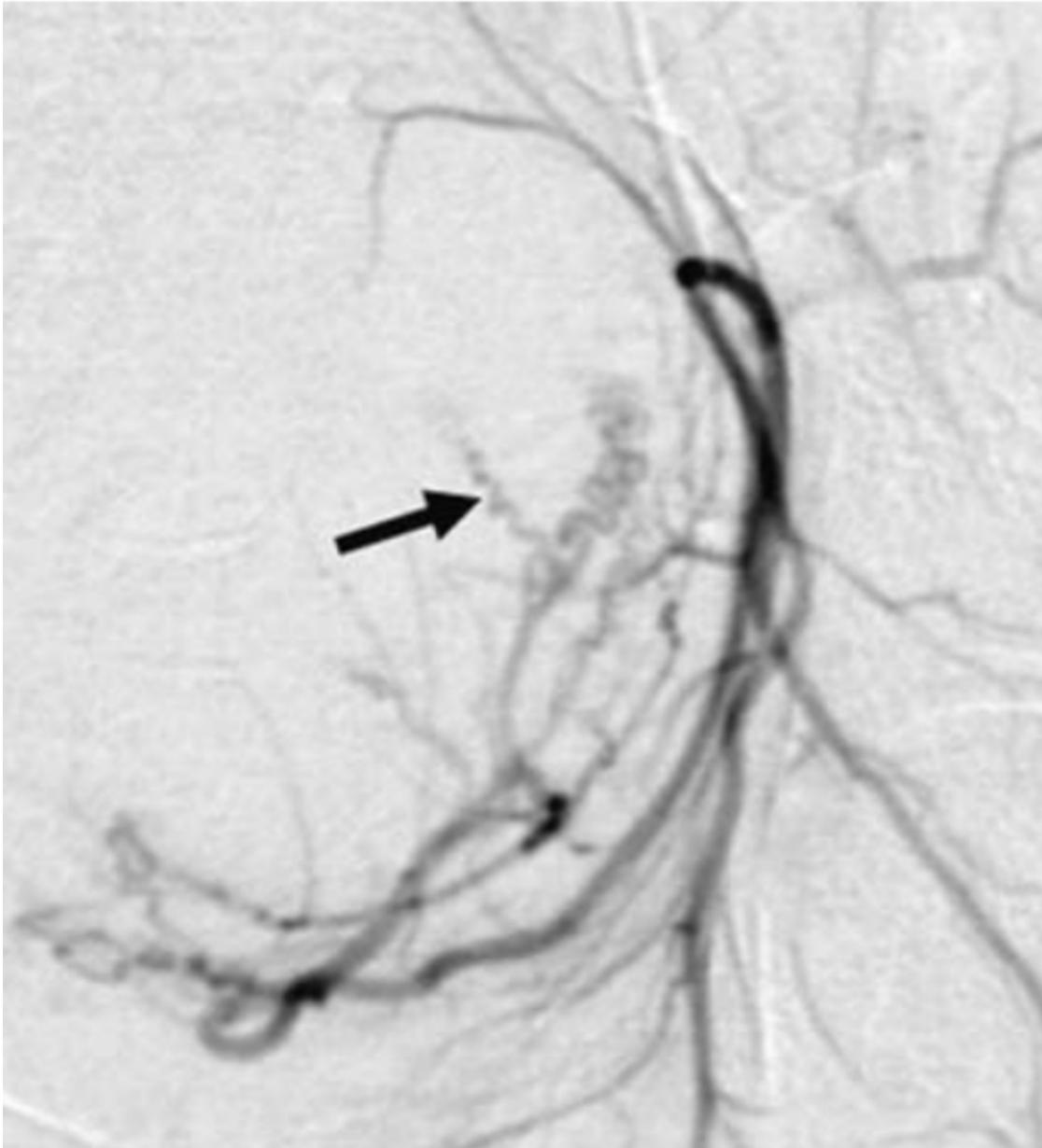


Fig. 4: Selective left uterine arteriogram shows large masses being fed by end arteries with corkscrew appearance (arrow), typical for fibroids

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Findings and procedure details

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First of all, the interventional radiologist should perform selective arteriography of internal iliac artery bilaterally, through use of 5F catheters, in order to evaluate pelvis vascular anatomy.

Then he should proceed to superselective catheterization of uterine arteries bilaterally, using a coaxial microcatheter. After positioning the tip of the microcatheter in the distal part of uterine artery he should proceed to embolic material injection:

- particles of polyvinyl alcohol (PVA)
- calibrated microparticles of increasing size from 200 to 900 micron

The impact of uterine artery embolization (UAE) for the purpose of diminishing the effect of uterine fibroids on fertility is still unclear.

Images for this section:

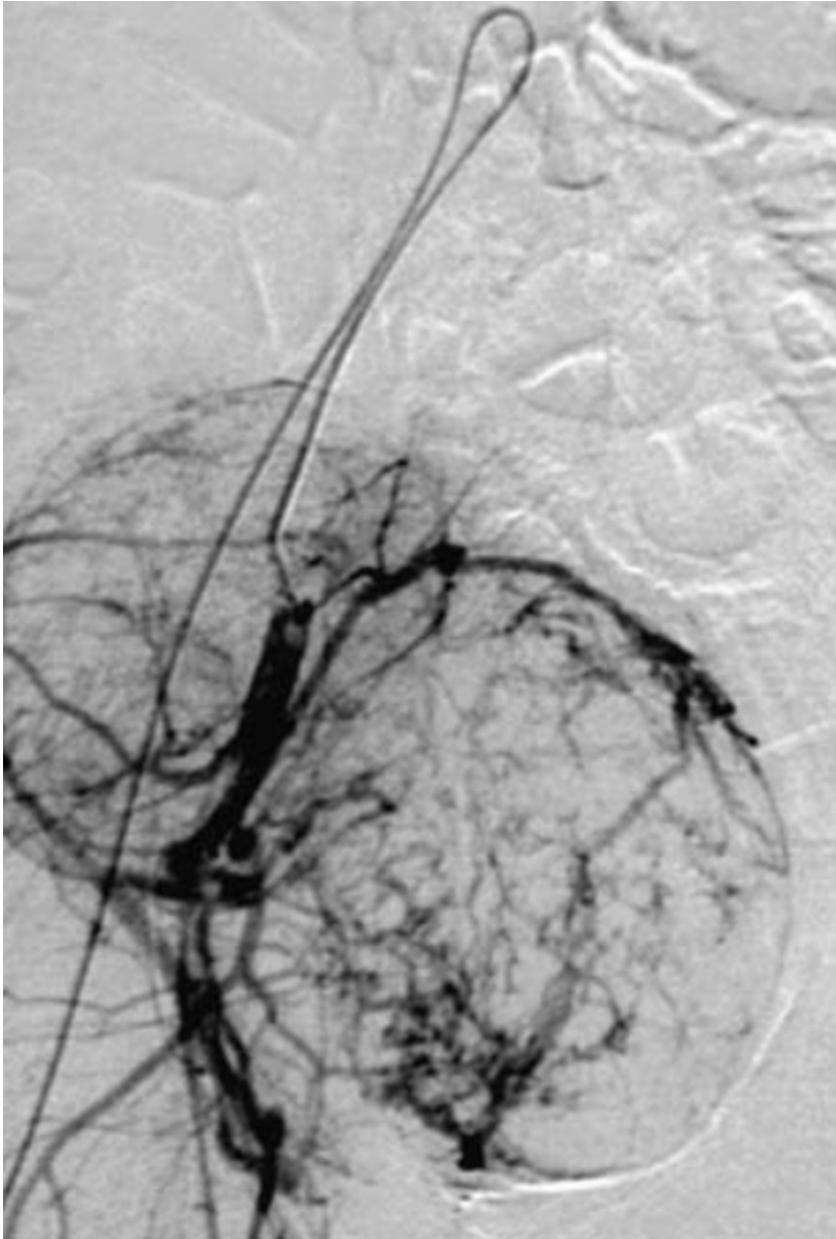


Fig. 1: Selective arteriogram of the right uterine artery shows large masses with persistent blush in the late arterial phase, compatible with fibroids

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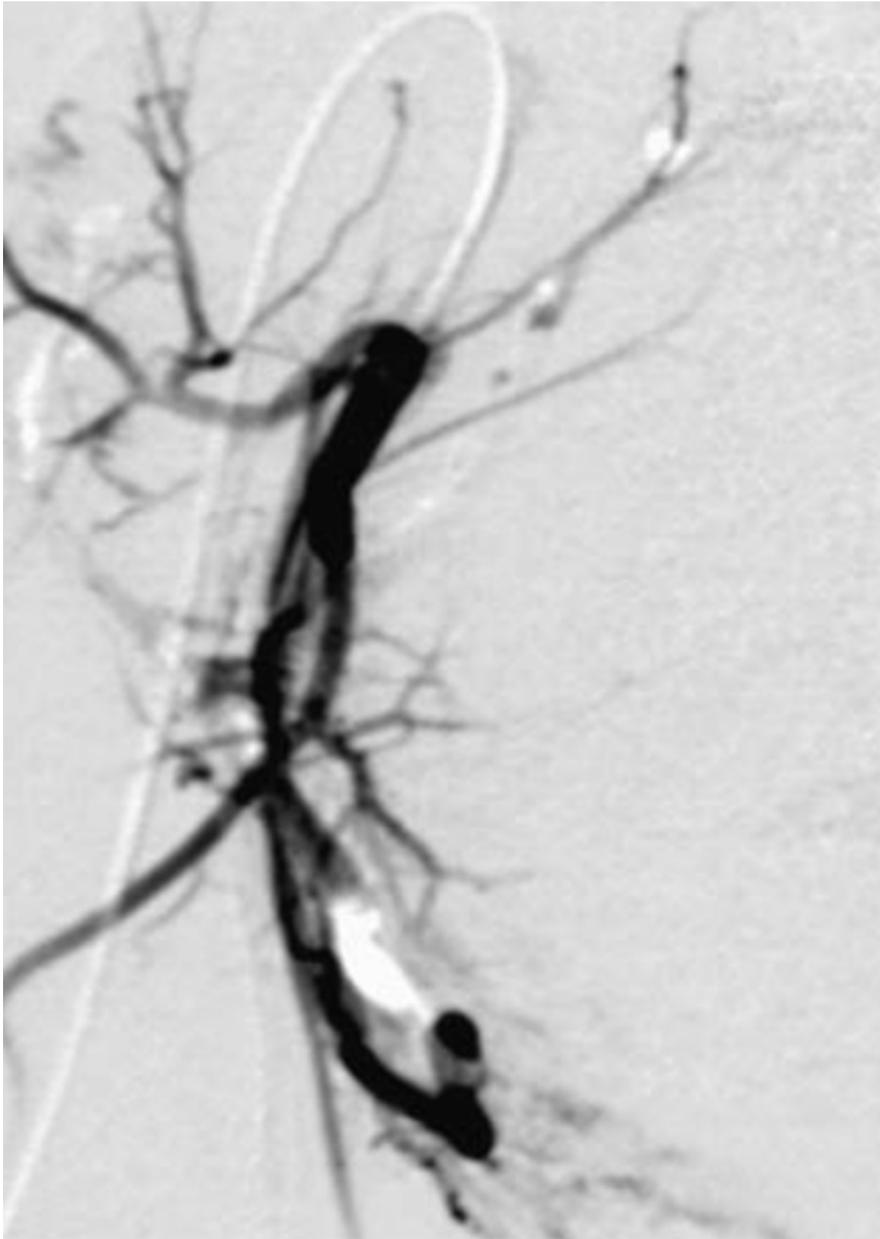


Fig. 2: Postembolization selective internal iliac angiogram shows occlusion of the right uterine artery.

© Selective arteriogram of the right uterine artery shows large masses with persistent blush in the late arterial phase, compatible with fibroids

Conclusion

For the vast majority of women affected by symptomatic uterine fibroids, endovascular embolization is an excellent alternative to traditional surgical therapy.

Uterine artery embolization has gained an important role as a safe and effective treatment modality for symptomatic fibroids since its introduction nearly two decades ago.

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