

Fertility Drugs and Rapid Growth of Leiomyomata

Clomiphene citrate, a common drug used for ovulation induction, is a non-steroidal agent and has both estrogen agonist and antagonistic properties, the latter being the main mode of action in patients undergoing ovulation induction. It has been reported to have a relatively wide margin of safety and does not require intense monitoring. However, this view will have to change.

A review of medical literature until December 1993 reveals a case report illustrating rapid growth of uterine myomata with clomiphene¹. Another recent local case report has shown that this drug does induce growth of uterine myomata².

Tamoxifen citrate (a similar fertility drug) used as adjuvant therapy in perimenopausal patients with breast cancer has also been shown to induce rapid growth in leiomyomata³. This has been attributed to the possible estrogen agonist properties of Tamoxifen acting directly on the leiomyomata. Uterine leiomyomata has been shown to have a higher content of steroid

receptors than the myometrium⁴. However, in younger women, besides its agonist action, these drugs may also block the estrogen receptors in the hypothalamus leading to intense output of gonadotrophins which lead to ovarian stimulation and growth of myoma. An increase in cervical and endometrial polyps with neoplastic change in the endometrium has been reported. The potential for similar problems occurring with use of clomiphene citrate should be borne in mind.

As both the above mentioned drugs are used commonly in General, Surgical and ObGyn practice, it is important that all women, particularly those having uterine leiomyomata have pelvic ultrasound examination before commencing drug therapy. These patients should be monitored every three to six months by repeat ultrasound examination to make sure that these myomata remain stable and that the drug can be continued safely. It would seem prudent to take this approach until further cases are reported.

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References

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