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Difficult scan question (DISQ)

DISQ 4: Serum CA 125 and benign looking adnexal masses

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Should you measure serum CA 125 in a young woman with a benign looking adnexal mass on ultrasound?

What we think we know

Serum CA 125 is raised in a significant number of women with ovarian cancer. It has been proposed by some that an ultrasound diagnosis of an adnexal mass should be followed by the measurement of serum CA 125 to estimate the risk of ovarian malignancy. Women with a normal CA 125 level may be managed expectantly or by conservative surgery, whilst a referral to a gynecological oncologist may be considered in those with increased measurements[1].

What we don't know

Previous studies have shown that small ovarian cysts (< 5 cm in diameter), which appear simple on ultrasound examination, are rarely malignant[2]. It has also been shown that a detailed assessment of morphological characteristics of an ovarian tumor by an experienced ultrasonographer can be used to differentiate accurately between benign and malignant ovarian tumors[3]. With the increasing use of ultrasound in gynecology, the diagnosis of adnexal mass is often made incidentally in women with menstrual disorders or in those who attend for routine pregnancy scans. Both groups have a very low risk of ovarian cancer and it is unclear whether the measurement of CA 125 would offer any advantages over subjective assessment of tumor morphology for the diagnosis of an early asymptomatic ovarian cancer.

What do the experts say?

Do you measure CA 125 in a premenopausal asymptomatic woman in whom a benign looking adnexal mass (< 5 cm) was found incidentally during a 'routine' ultrasound examination?

The panel was almost unanimous, with 92% of responders saying that CA 125 should not be measured.

If you do perform CA 125 measurements, what cut-off would you consider as being abnormal?

Given the answer above, only a minority of responders provided their cut-off for 'abnormal' CA 125, ranging mainly between 25 and 35 IU/mL.

If the CA 125 readings are normal what follow-up would you recommend?

The panel was unanimous in advocating initial follow-up, with 70% of the panel calling for a follow-up scan 3–6 months later and a minority who would do it earlier (at 6 weeks). Two panelists were confident enough not to offer any further follow-up if the first follow-up showed no change, whilst four panelists proposed surgical management of a persistent cyst. The majority advocated further ultrasound follow-up at 3–6-month intervals.

One of the panelists described the difficulty facing any guideline development in this area: 'This is a very difficult question to answer. There is NO scientific evidence as to how to manage these; we simply do not know if we do more harm (creating adhesions with its consequences, for instance) than good (prevention of complications such as torsion, for instance) by removing them surgically. I try to be as conservative as possible (doing nothing or checking them with ultrasound). It would be extremely interesting, but practically difficult, to observe these types of ultrasound findings over a whole lifetime and just see what happens: probably very little would happen. . .'

Bottom line

There is no reason to measure CA 125 in a young woman with a benign looking ovarian cyst. At least one follow-up visit is required to monitor the size of the cyst.

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