**Objective**

To examine the natural history of DE in women that are managed expectantly.

**Methods**

Retrospective cohort study of women with DE (n = 87) who were managed expectantly for a minimum of 6 months. All women attended for a minimum of two ultrasound scans by a single expert ultrasound operator.

Mean diameter of endometriotic nodules was calculated from measurements in three orthogonal planes. Nodule growth rate was expressed as annual change in the mean diameter.

**Results**

1411 women were found to have moderate or severe endometriosis on pelvic ultrasound. 267 women had a minimum of two scans by a single operator. 100 women were managed expectantly, of which 87% had evidence of DE. The median age of women was 40 years (27-63). The median follow up between visits was 666 days (181-2984).

In 28/87 (32%, 95% CI 22 - 42) women, new nodules were recorded. 5/79 (6%, 95% CI 1 - 11) women had spontaneous resolution of nodules. No women had complete resolution of all endometriotic nodules. 21/87 (24%) women experienced an overall reduction in nodule size, 27/87 (31%) experienced no meaningful difference and 39/87 (45%) experienced an increase in nodule size. 3/25 (12%) women developed new evidence of bowel involvement. No women developed new evidence of bladder involvement. The median change in diameter of nodules during the study period was +0.33mm (-28.67 to +19.00), with an annual growth rate of +0.16 mm/year (-7.73 to +20.03). Larger nodules were more likely to decrease in size than smaller nodules (Spearman’s rank correlation of -0.33, P <0.001)

**Conclusions**

Many women with moderate or severe endometriosis can be managed expectantly.

The behaviour of deep pelvic endometriosis is variable.

In the majority of women there is no evidence of progression of deep endometriosis over time.