Methods: 130 cases were selected from Jan 2011 to Dec 2016 at the Chongming branch of Xinhua Hospital, which were diagnosed as early unruptured tubal pregnancy. The ultrasonographic features of preoperative ultrasonography were analyze.

Results: In 130 cases, 120 cases were diagnosed by ultrasound, the diagnostic coincidence rate was 92.30%. The missed diagnosis rate was 7.69%. The characteristics of ultrasound images included: 1. Endometrial ultrasonographic features: the endometrium thickness > 8mm accounted for 48.6%, ≤8mm accounted for 41.54%; endometrial with high echo were 77.69%, low and medium echo were 0.05% and 16.92%. The endometrium with three lines was 30%. Intrauterine gestational sac accounted for 7.69%.

2. Ectopic pregnancy mass characteristics:
The proportion of embryo sac mass was 21.67%. The heterogeneous mass type accounted for 61.67%. The mean value of of ectopic pregnancy was 30.68 ± 16.57mm. The mass with no blood were 44.17%. The mass was 55% of the ipsilateral oviduct thickening, and was 92.50% from the ipsilateral ovary.

Conclusions: Parovarian mass, tubal thickening, endometrium thickness > 8mm is an important observation index for early unruptured tubal pregnancy. These indexes should be observed in ultrasound examination, which can help to improve the detection of early tubal pregnancy.