

Ovarian lesions in children and adolescents--an 11-year review

[K S H de Silva](#)¹, [S Kanumakala](#), [S R Grover](#), [C W Chow](#), [G L Warne](#)

Abstract

Objective: To describe the spectrum of pediatric ovarian pathology, identifying the clinical features and ultrasound characteristics that help in decisions about patient management, and to correlate these with ovarian pathology.

Patients and methods: Retrospective analysis of 134 records of patients admitted with ovarian lesions to Royal Children's Hospital, Melbourne over an 11-year period (1989-99 inclusive).

Results: The age of presentation varied widely from 2 days to 19 years with 63.4% being over 12 years of age. Eighty-one patients (60.4%) had physiological or functional ovarian cysts, 52 of which required surgical intervention. Forty-four patients (32.8%) had neoplastic lesions and a palpable abdominal mass was felt in 53.7% of them. Mature cystic teratoma or dermoid cyst, seen in 27 patients, was the commonest neoplasm, and 77.8% of these children were under 12 years. Six children had malignant ovarian neoplasms, of which five were germ cell in origin. Five patients had epithelial or stromal neoplastic lesions. Endocrine manifestations were seen in seven patients and included early or precocious puberty and virilization. Plain trans-abdominal ultrasonography was useful in identifying ovarian lesions in 94 (81.7%) of the 115 patients in whom it was performed, but was not helpful in determining the nature of the lesion. Neoplastic ovarian lesions were commonly greater than 10 cm in diameter

Conclusions: Physiological or functional ovarian cysts are the most common ovarian lesions seen in the pediatric age group and malignant neoplasms are rare. A palpable abdominal mass or ovarian lesion >10 cm was significantly associated with the lesion being neoplastic. Lesions <5 cm in post-pubertal girls were significantly more likely to be non-neoplastic. Ultrasonography is useful in localizing ovarian lesions but is not helpful in determining their pathological nature. Endocrine manifestations sometimes occur with either benign or malignant lesions of the ovary.