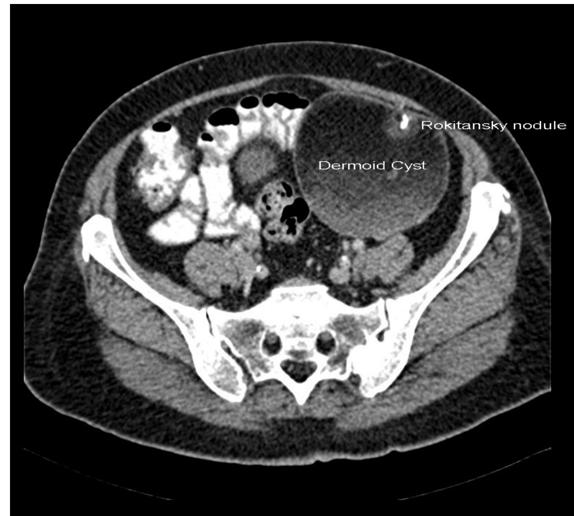
(***Refer to page 35***)

Answer: Ovarian dermoid cyst (Mature cystic teratoma)

An ovarian dermoid cyst (mature cystic teratoma) is a congenital benign germ cell tumour that contains tissues derived from all three germ cells layers (ecto, endo and mesoderms), but with a predominance of ectodermal components. These cysts may contain hair, skin, epithelium, fat and teeth. Dermoid cysts can occur elsewhere in the body, such as the orbit, spine and neck. They occur most commonly in the reproductive years, and usually present with either chronic pelvic pain, a palpable mass or less commonly with acute pain due to torsion or intratumoural haemorrhage. Although torsion is the most common complication, cysts may also rupture and rarely undergo malignant change developing into squamous cell carcinomas.

Ultrasound scan (USS) is typically the first imaging investigation, the most common appearances of which are a complex mass with internal echogenic components. [1] A fat-fluid interface may be identified, along with posterior acoustic shadowing due to calcification within. On USS dermoid cysts are reported to have an average size of 7cm, being mostly cystic, although solid in one third of cases and bilateral in the minority (8.5%). [2] On computed tomography (CT) scan the mass is typically largely composed of fat, with



either a sharp or gradual fat-fluid interface. It is usual to identify calcification within, often 'tooth like' in nature revealing its ectodermal origin**.** A Rokitansky nodule (or dermoid plug) refers to the small solid protuberance projecting from a dermoid cyst **(Panel)**, which is virtually pathognomonic of a dermoid. Magnetic resonance imaging (MRI) will exquisitely demonstrate the variable composition of a dermoid, but is only indicated in complex cases. Ovarian dermoid cysts may be visible on plain abdominal radiograph, largely to the calcific 'tooth' component, with on occasion the subtle appearance of adjacent low density due to fat. [3]

Treatment is typically surgical resection to prevent torsion or relieve symptoms. This may be performed via either open or laparoscopic approaches.

REFERENCES

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3: Wolfgang Danhert. Radiology Review Manual, 6th edn. Lippincott Williams & Wilkins. Philadelphia, PA. p1027.