CLINICAL QUIZ (p145-146) ANSWER

Case 1:
Pathological Diagnosis: Congenital cystic adenomatoid malformation, type 2.

Plain chest radiograph (Figure 1a) at birth reveals consolidation confined to the right upper lobe by the oblique fissure, containing air bronchogram and a roundish lucency in the right juxtahilar region.

Helical CT of thorax (Figure 1b) show a 1-cm thin-walled cavity containing air-fluid level in the right upper lobe and there is patchy density in the adjacent lung, which can represent changes of consolidation, atelectasis and/or fluid-filled cysts.

While plain radiograph usually allows detection of the anomaly, CT scan has its advantages in the better characterization of the lesion with delineation of the extent of the malformed lung. There is diversity of possible CT features resulting from the variable content, number and size of the cysts. When macroscopic cyst is present, the communication with the airway is also better depicted on CT scan. Helical scanning with IV contrast can also facilitate display of vascular supply from aberrant systemic arteries, which is atypical but has been reported in numerous cases of CAM.

Case 2:
Answer: Bilateral Hydrocele
This is due to accumulation of the peritoneal fluid in the scrotum through the patent processus vaginalis. Usually, it subsides with time and no intervention is indicated.

Case 3:
Answer: Meconium hydrocele
Trans-illumination test was negative, and AXR showed speckle of calcified nodules inside the scrotum. Meconium hydrocoele is secondary to meconium peritonitis as a result of bowel perforation in utero. The trans-illumination test is negative when the scrotal fluid is turbid. It is often associated with intestinal atresia, inssipated meconium, volvulus or vascular compromise in utero. Contrast study of gastrointestinal tract, surgical consult and sweat test are indicated.

Case 4:
Answer: Pneumoperitoneum with bilateral scrotal air
His bowel perforation was due to mucormycosis invasion of small intestine, confirmed by histology of the resected small intestine showing presence of broad and aseptate hyphae. He was successfully treated with Amphotercin B and surgery. Intestinal mucormycosis is a rare cause of bowel perforation in premature newborn; the clinical features might mimic necrotizing enterocolitis. Prognosis is usually grave because of delayed in diagnosis and initiation of anti-fungal treatment.