

CLINICAL QUIZ (p180-181) ANSWER

Case 1

1. Figure 1 showed air-filled colon with complete haustration (arrow) that obliterated the right cardiophrenic angle. Figure 2 showed the air-filled tubular structure anterior to the heart.
2. It was diagnostic of Morgagni hernia with herniation of the transverse colon through the foramen of Morgagni. Morgagni hernia is a rare form of congenital diaphragmatic hernia, one per 300 congenital diaphragmatic hernias. Morgagni hernias occur behind the sternum through the defects in the diaphragm, probably secondary to a developmental failure of the retro-sternal segment of the septum transversum. The defect on the left is usually obliterated by pericardium. Therefore, most Morgagni hernias are on the right. The majority of patients with Morgagni hernia were diagnosed incidentally on chest radiograph taken for other reasons, bronchiolitis in the current case. Elective surgical treatment is indicated to prevent volvulus or intestinal obstruction. Recently, successful laparoscopic repair was reported.

Case 2

1. Figure 3 showed irregular osteolytic destruction (arrow) in the metaphysis was mixed with sclerosis at the distal right radius. The distal ends of the left radius and ulna also exhibit metaphyseal radiolucency mixed with sclerosis. Figure 4 showed tiny ill-defined osteolytic lesions affecting the diaphysis of the left tibia. Thin radiodense lines are also noted in both the distal tibia and fibula.
2. The diagnosis is leukaemia. Bone and joint pain have been reported to occur in 21-59% of children with acute leukaemia. Articular symptoms are especially common and may cause confusion with rheumatic fever, juvenile chronic polyarthritis or osteomyelitis. Bony radiographic abnormalities have been reported to occur in 41-70% of children with acute lymphoblastic leukaemia. These findings can be subtle and difficult to detect, especially when they are symmetrical in distribution.