Abdominal Radiograph in Systemic Sclerosis

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Systemic sclerosis can give rise to many findings in the abdominal radiograph. Detection of lung base changes together with “sheet-like” soft tissue calcification and large bowel ileus are important clues to a unifying diagnosis of systemic sclerosis.

A 51-year-old woman presented with a history of several months’ duration of abdominal distension and constipation. The abdominal radiograph (Figure 1) showed evidence of large-bowel dilatation of the transverse colon, with normal mucosal features and fecal loading in the sigmoid and rectum. Additionally, there was evidence of florid soft-tissue calcification involving bilateral iliacus muscles. The lung bases showed reticular shadowing with pleural thickening, consistent with pulmonary fibrosis. The constellation of signs — muscle calcifications¹, pulmonary fibrosis², and nontoxic megacolon³ — indicates systemic sclerosis, with bowel atony accounting for the patient’s presentation. The hand radiograph (Figure 2) shows the classic appearance of

systemic sclerosis — distal phalanx resorption with soft-tissue calcinosis.

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Figure 1. The abdominal radiograph shows evidence of dilatation of the transverse colon, with normal mucosal features (arrowheads) and fecal loading.

Figure 2. Hand radiograph shows the classic appearance of systemic sclerosis — distal phalanx resorption with soft-tissue calcinosis.