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Case Blog

Title: Abdominal Trompe-L'oeil Spirals

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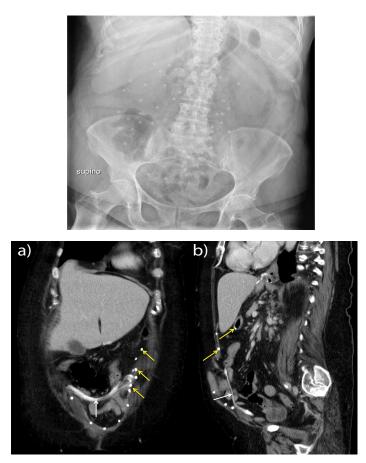


Figure 1: Abdominal anteroposterior plain radiograph showing multiple spiral-shaped radiopaque metal bodies. Figure 2: Abdominal coronal (a) and sagittal (b) computed tomography cross sections showing a mesh in the abdominal wall (white arrows) and multiple coiled radiopaque metal autosuture tackers (yellow arrows).

Case Blog

A 69-year-old woman arrived to our Department for abdominal pain, hyperpyrexia and acute confusional state. Patient's history was remarkable for bipolar syndrome, severe binge eating disorder with morbid obesity. In 2009 she underwent to bariatric surgery followed by 57 kg weight lost, from initial 142 kg. Height was 160 cm. Because of a wide laparocele, in 2010 she underwent to unspecified surgical repair. She was daily taking valproic acid 1.000 mg, fluoxetine 20 mg, and alparazolam 0.50 mg. Physical examination showed diffuse abdominal tenderness, high fever, and macrohaematuria. Neurologically she was somnolent and confused, condition ascribed to fever (39.3°C) or possible inappropriate assumption of psychoactive drugs. A plain film of the abdomen in anteroposterior projection showed multiple radiopaque spiral bodies (Figure 1).

Discussion

The initial suspicion was foreign metallic bodies ingestion (clothespins) in a psychiatric patient with binge eating disorder. However, abdominal computed tomography described radiopaque devices consistent with a mesh and metallic spirals detectable in herniated bowels. No intestinal perforation or obstruction was found (Figure 2). It was then clear that the foreign bodies were

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spiral tacks employed for intraperitoneal mesh fixation by laparocele repair operation. Different fixation devices can be incidentally observed on plain abdominal radiographs. Materials from which mesh is manufactured are usually derived from polypropylene and functions as a bridge across defective tissues. The mesh is usually located in preperitoneal layers and held in place with tissue glue or metallic tacks [1]. Length of tackers is about 5 mm. They occasionally penetrate the neighboring structures, migrate into the peritoneal cavity and induce bowel perforation due to their sharp plug components [2,3]. If not carefully fixed, tackers can fall into the abdominal cavity or the sharp end of a tacker not buried properly cause injuries with movements. The patient had a final diagnosis of pyelonephritis and she was successfully treated with a course of intravenous ciprofoxacin.

References

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