



Intussusception – Not Only a Childhood Disease

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A 53 year old woman with known melanoma was admitted with intermittent diffuse abdominal pain. A computerized tomography study showed a complex soft tissue target-shaped mass in the mid-abdomen [Figure], typical of small bowel intussusception. The diagnosis of intussusception caused by metastatic melanoma to the small bowel was confirmed at subsequent laparotomy.

Intussusception, the telescoping of a proximal segment of bowel (intussusceptum) into an adjacent distal segment (intussusciens), is a rare condition in adults and differs substantially from the much more common intussusception in infants (only about 5% of intussusceptions occur in adults, the other 95% in infants) [1].

In contrast to childhood intussusception, which is idiopathic in 90% of cases, adult intussusception has an underlying

cause in about 90% [1]. Approximately 65% are due to neoplasm, whether benign or malignant. Non-neoplastic processes constitute 15–25% of cases, and idiopathic or primary intussusceptions about 10% [2]. In the majority of cases (about 65%) intussusception arises in the small bowel. Most of these are secondary to benign lesions, including benign neoplasms, adhesions, Meckel diverticulum, celiac disease and others. Malignant lesions, mainly metastatic, causing intussusception in the small intestine account for about 15% of cases and melanoma is the most common one by far [2]. Intussusception in the large bowel is more likely to have a malignant etiology, with primary malignant lesions, adenocarcinoma and lymphoma occurring in 50–60% of cases [2,3].

Adult patients present with a variety of symptoms, most often chronic intermittent abdominal pain. Other symptoms include nausea, vomiting, melena, weight loss, fever and constipation [4–6]. Symptoms are in most cases of long duration, lasting several weeks to several months. Physical examination is often unremarkable. Intussusception in adults is therefore difficult to diagnose clinically and necessitates imaging [4]. The appearance of intussusception on CT is characteristically a complex soft tissue mass, consisting of the outer intussusciens and the central intussusceptum, and has either a target or a reniform appearance, depending on the axis

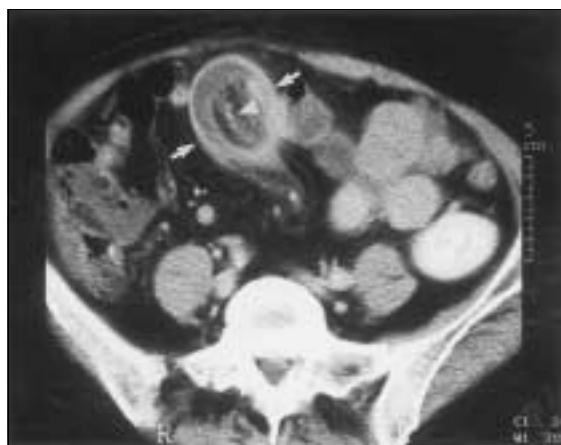
of the CT beam relative to the intussusception [6]. Within the mass there is often an eccentric area of fat density representing the intussuscepted mesenteric fat, and the mesenteric vessels within it are often visualized. The etiology of intussusception, however, cannot be determined on CT except in a case of lipoma, which appears as a low density mass typical for fatty tissue [6].

With the widespread use of CT in the evaluation of non-specific abdominal pain, the diagnosis of intussusception is nowadays most often made by the radiologist since the CT features described here are virtually pathognomonic [5,6].

References

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A complex soft tissue target-shaped mass in the mid-abdomen, composed of the outer intussusciens (arrow) and the central intussusceptum (arrowhead) surrounded by low density tissue, representing the intussuscepted mesenteric fat (arrow).