

Penetrating Crohn's disease – adult vs pediatric patients

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Introduction:

Crohn's disease (CD) is increasing in prevalence worldwide, especially with young people. Magnetic resonance enterography (MRE) differs from routine magnetic resonance imaging (MRI) by oral administration of neutral fluid contrast before scanning. It allows for recognising and monitoring changes during therapy as well as assessing complications, which makes it valuable diagnostic modality.

Aim:

The aim of the study was to verify the value of MRE in the evaluation of penetrating CD in adult and pediatric patients.

Materials & Methods:

The study included 137 adult and 18 pediatric patients diagnosed with CD, who underwent MRE with intravenous administration of a contrast agent. All studies were performed using a 1.5T scanner according to a local study protocol. All MRE findings were further confirmed by colonoscopy, or intraoperatively if applicable.

Results:

In the adult group 28 fistulas were identified: 4 complex perianal, 16 simple intestinal (7 blind and 9 ileo-colonic) and 8 complex intestinal (3 ileo-cecal and 5 ileo-colonic). Peri-intestinal abscess formation was observed in 9 patients (6,57%).

In the pediatric group in 4 patients (22,22%) small intestine fistulas were found, whereas abscess was observed in 4 patients (22,22%). In 10 children inflammatory infiltration of peri-intestinal fat was depicted.

Conclusion:

MRE is a well-tolerated modality and a reliable tool in diagnosis, evaluation of the disease activity and assessment of potential complications of Crohn's disease. Fistulas occurrence is similar in both adult and pediatric group, peri-intestinal abscesses are more encountered in adults and peri-anal abscesses are more characteristic for children.

Keywords: crohn's disease, inflammatory bowel disease, magnetic resonance enterography