4. APPENDICEAL INTUSSUSCEPTION – A DIAGNOSTIC AND THERAPEUTIC SURGICAL PROVOCATION

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Introduction. Appendicular intussusception (AI) is a rare and unexplained phenomenon characterized by appendix segment telescoping into itself or into the cecum causing acute abdomen syndrome. It was first described by McKidd in a 7-year-old boy in 1858. Since then the literature on it has been confined to a few case reports and very small cases series, in totally 280 cases being reported till now.

Aim of study. Searching for specialized literature and analysis of demographic characteristics (age and gender), clinical features and optimal treatment options in case of AI.

Materials and methods. Examination of publications from PubMed and Google Scholar Search according to the following keywords: „appendiceal AND intussusception", „appendix AND intussusception", and „appendix AND intussuscepted" with identification of 89 cases of AI reported during the period 2008-2020. Additionally, Chaar CI et al (2009) paper on the topic was included in the evaluation list, representing a comprehensive review of the English literature on AI and presenting 191 cases described for the period 1858-2007.

Results. The incidente of AI in adults accounts for about 80% of all cases, most frequently the pathology being diagnosed in middle-aged females (72.2%). Although it does occur in children (20%) too; however, in this case it seems to be slightly more common in males (63%) younger than 10 years of age. The pathophysiology of AI remains unclear; several etiologies have been described, namely, anatomical variations (fetal-type cecum, mobile appendix and mesoappendix, wide appendicular lumen relative to the distal portion) and pathological conditions of the appendicular wall (tumors-27.5%; endometriosis-22.1%; inflammation-20.7%). The signs and symptoms of AI are variable and range from asymptomatic to those suggestive for acute appendicitis, including severe pain in the right lower quadrant of the abdomen, nausea, vomiting, diarrhea or constipation, anorexia. Several radiological and endoscopic preoperative examinations seem to be useful in AI detection: barium enema, ultrasound of the right iliac fossa, computed tomography, magnetic resonance imaging, colonoscopy or diagnostic laparoscopy. Treatment options (conservative management, minimally invasive approach, surgery) differ significantly depending on underlying pathological condition, benign or malignant. In addition, spontaneously reduced appendiceal intussusception cases have also been reported in the literature.

Conclusion. AI is a rare pathological entity which in most cases presents clinically appendicitis-like symptoms; however, it should be taken into consideration when assessing the patient with right lower quadrant abdominal pain. In addition, due to these differences in operative management it is imperative that the practicing surgeon be aware of this rare but benign and resectable diagnosis.