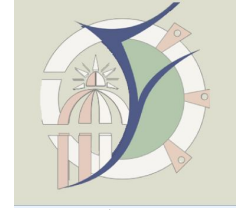




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6. البحث السادس: بحث جماعي منشور

**Reducing the frequency of unnecessary rectal  
biopsies by combined interpretation of clinical  
and radiological findings in Egyptian children  
with suspected Hirschsprung's disease**

Egyptian Pediatric Association Gazette

الملخص الانجليزي:

**Abstract**

**Introduction:** Hirschsprung's disease (HD) should be considered in children with neonatal-onset constipation. Clinical differentiation between HD and idiopathic constipation (IC) is difficult in late presenting infants. Consequently, pediatric surgical centers receive numerous referrals for rectal biopsies, requiring admissions and GA, particularly if suction biopsy is unavailable, and in older children.

**Methods:** Forty-two cases referred for rectal biopsy, were studied for clinical features, single contrast enema, as compared to rectal biopsy findings, to determine the statistical reliability towards achieving a diagnosis.

**Results:** The mean age at presentation was 106 days in HD patients, and 172 days in IC. Significant neonatal clinical features were present in 54%. Delayed passage of meconium was present in 86% of HD, compared to 14% of IC ( $p=0.001$ ). Rectal examination found a tight segment in 90% of HD, and a distended anorectum in 64% of IC ( $p=0.005$ ). The sensitivity of contrast enema was 86%, and the specificity was 90%. The histological analysis of strip rectal biopsy was sensitive in 93%, and inconclusive in 7%.

**Conclusion:** This audit generated a checklist of 6 clinical and 3 radiological criteria, to differentiate HD from ID, including clinically (1) neonatal onset; (2) male sex; (3) congenital anomalies, dysmorphic features and/or family history of HD; (4) delayed meconium passage; (5) enterocolitis or significant bowel obstruction/impaction; (6) tight segment on rectal examination; and radiologically (7) funneled transition zone or a reversed recto sigmoid index ( $<1$ ); (8) delayed evacuation of contrast after 24 h; and (9) absent distension of the anorectum with contrast, absent mucosal irregularities, and absent sigmoid looping.