RARE AGE PRESENTATION OF PERFORATED APPENDIX

DR. Fawzi ben shatwan
Dr. Aziza alfakhri

ABSTRACT:

Neonatal perforated appendicitis is rare condition associated with high mortality and morbidity. We report rare case of neonatal perforated appendicitis who presented clinically with features suggestive peritonitis found at exploration to have perforated at the tip of appendix and confirmed by histopathology diagnosis was suppurative appendicitis

Keywords: Neonatal appendicitis/ necrotizing enterocolitis/ peritonitis/ hirschsprung disease (HD)

INTRODUCTION:

Acute neonatal appendicitis is rare condition with significant morbidity and mortality it tends to occur in premature infant with increase perforation rate and rapid progression to peritonitis, A review of literature suggest that presence of different clinical signs and symptoms

Including: abdominal distention, vomiting, refuse feeding, irritability, temperature instability.

Especially in presence of radiological signs like: abnormal gas pattern ,obliterated psoas shadow, right iliac fossa abscess.

May provide a clue to diagnosis; so acute appendicitis should be considered as differential diagnosis in neonate presenting with features suggestive of intra-abdominal inflammatory pathology to make early diagnosis and decrease morbidity and mortality

CASE REPORT:

Preterm female baby ,born at 32 weeks of gestation by cesarean section(CS), transfer to pediatric surgery department in Benghazi children hospital at age 11 days of life with history of abdominal distention starting at age 6th day of life ;on examination baby was lethargic, looks sick, toxic , abdomen was distended, shiny, with sluggish bowel sound.

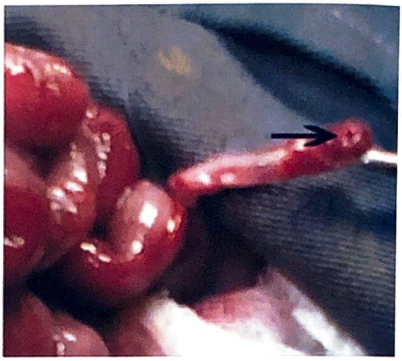
Erect abdomen x-ray showing air under diaphragm, ultrasound abdomen revealed evidence of mild wall thickness of multiple loops with poor peristalsis and free fluid in between,

White cell count 12.2×10^3/μL; hemoglobin 12.0g/dl; plat elate count 21×10^3/μL; BBG(O)Rh+; MBG(O)Rh+;

Urgent exploration was performed, intra operative finding was perforation at the tip of appendix with purulent fluid in peritoneal cavity, whole bowel was healthy, no other perforation, or any gastrointestinal pathology, with normal bowel caliber.

Appendectomy was performed and wash with warm normal saline was done before closure, appendix sent to histopathology and histopathological diagnosis was suppurative appendicitis, post-operative the baby recovered well, and discharged to home able to tolerate feeding and good general condition ,on 2 months follow up the baby was thriving well with no other complain.

Figure.1 perforated appendix at the tip- kidskunst.info



DISCUSSION*:

Acute appendicitis is common cause of abdominal pain in childhood, it is very rare in neonate and difficult to consider in the differential diagnosis,

Incidence of neonatal appendicitis has been reported as 0.04 - 0.2%.

Affected males in approximately 75% of the time, and 25%-50% of all reported cases involve premature infants, less than

Dr. fawzi ben shatwan consult in pediatric surgery in Benghazi children hospital/teaching staff in Benghazi university
Dr. Aziza abdelmoneam alfakhry doctor in pediatric surgical department in Benghazi children hospital

50 cases have been reported over the last 30 years ,with mortality rate ranging between 20%-25%.

Rarity of neonatal appendicitis may attributed to the funnel shaped appendix with wide opening in to the cecum ,liquid diet ,lack of fecalith and the presumed relative infrequency of lymphatic hyperplasia in the pre appendicular region,

High mortality and morbidity associated with perforated appendicitis in neonate attributed to the thin appendicular wall and in distensible cecum ,facilitated by the small under developed and functionally non-existent omentum, small size of peritoneal cavity allowing more rapid diffuse contamination and little physiological reserve;

So high index of suspicion and awareness is required for prompt diagnosis unusual causes of intra abdominal inflammatory pathology in neonate, treatment of neonatal appendicitis is primarily surgical ,aimed at appendectomy along with peritoneal lavage result in satisfactory recovery and remain the treatment of choice,

Histological diagnosis and assessment of sample is mandatory to rule out the possibility of underlying causes of perforated appendix in neonate like: necrotizing enterocolitis, hirschsprung disease (HD), which may necessitated further management.

Conclusion*:

Rarity of the pathology and atypical signs and symptoms of perforated appendicitis in the neonate ,leading to significant mortality and morbidity, and delay of diagnosis

We require strong suspicion with experience in presence and report cases to suggest early diagnosis of perforated appendicitis in neonate that help in early surgical intervention and decrease mortality and morbidity

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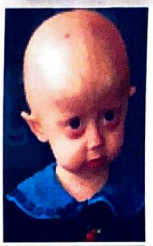
Medico*Images*

Progeria ***is an extremely rare autosomal dominant genetic disorder in which symptoms resembling aspects of aging are manifested at a very early age. Progeria is one of several progeroid syndromes. Those born with progeria typically live to their mid-teens to early twenties. It is a genetic condition that occurs as a new mutation, and is rarely inherited, as carriers usually do not live to reproduce. Although the term progeria applies strictly speaking to all diseases characterized by premature aging symptoms, and is often used as such, it is often applied specifically in reference to Hutchinson–Gilford progeria syndrome (HGPS).***



Progeria was first described in 1886 by Jonathan Hutchinson. It was also described independently in 1897 by Hastings Gilford.[11] The condition was later named Hutchinson–Gilford progeria syndrome. The word progeriacomes from the Greek words "pro", meaning "before" or "premature", and "gēras", meaning "old age". Scientists are interested in progeria partly because it might reveal clues about the normal process of aging.

Hutchinson-Gilford Progeria Syndrome. HGPS is a childhood disorder caused by mutations in one of the major architectural proteins of the cell nucleus. In HGPS patients the cell nucleus has dramatically aberrant morphology (bottom, right) rather than the uniform shape typically found in healthy individuals (top, right).