

LEFT SIDED ACUTE APPENDICITIS WITH KARTAGENER SYNDROME: A RARE FINDING

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Article Info	ABSTRACT
<p>Received 23/01/2015 Revised 29/01/2015 Accepted 12/02/2015</p> <p>Key words: Acute Appendicitis, Kartagener Syndrome.</p>	<p>Kartagener syndrome is a congenital autosomal recessive disorder which includes Situs Inversus Totalis, Chronic Paranasal Sinusitis and Bronchiectasis. We hereby report a 30 year old male patient presented with left sided Acute Appendicitis with Kartagener Syndrome. Patient also gives history of recurrent upper respiratory tract infections and infertility. Kartagener syndrome is a congenital autosomal recessive disorder which includes situs inversus totalis, chronic paranasal sinusitis and bronchiectasis situs inversus totalis is rare genetically determined positional anomaly characterised by transposition of thoracic and abdominal viscera like mirror image of normal. Clinical feature of Kartagener Syndrome involve recurrent upper respiratory tract infections like sinusitis, otitis media with Bronchiectasis and Infertility. Left sided acute appendicitis can occur two congenital anomalies which are situs inversus totalis and intestinal malrotation. Abnormal location of Appendix makes the diagnosis of acute appendicitis more difficult. We hereby report a 30 year old male patient presented with left sided acute appendicitis with Kartagener Syndrome. Patient also gave history of recurrent upper respiratory tract infections and infertility.</p>

CASE REPORT

A 30 year old Hindu married male presented in Emergency Department of P.B.M.Hospital, Bikaner Rajasthan. He had 2 days history of pain lower abdomen, anorexia and malaise. On clinical examination, tenderness in both right and left iliac fossa. Rebound tenderness and localised guarding and rigidity found in left iliac fossa. Diagnosis of acute abdomen was made and Investigations were done. His haemoglobin was 11.9 g/dl and TLC was 21,200. Urine microscopy was found normal. Chest X ray revealed dextrocardia. Ultrasonography shows situs inversus with acute appendicitis. CECT Abdomen also shows situs inversus.

Patient is planned for appendicectomy under spinal anaesthesia. Skin Incision was given at Mc Burney

point in left iliac fossa. Peritoneal cavity entered, caecum is identified and confluence of taenia is followed. Appendix is found adherent and inflamed. Mesoappendix is tied and appendicectomy is done. Local peritoneal toilet is done and wound is closed in layers. Postoperative recovery was uneventful and patient was discharged on 4th day.

DISCUSSION AND CONCLUSION

Kartagener syndrome is an autosomal recessive disorder defined by recurrent upper respiratory tract infections, situs inversus totalis and bronchiectasis. It is due to genetic mutation in genes encoding for Dynein which is essential for chromosome motility during mitosis. Mutations in genes which encode motility proteins constitute sperm tails and cilia in the respiratory and the reproductive tubes and causes inhibition of their functions.



During embryonic life cilia are important to decide laterality. Cilia moves to direct right and left asymmetry. So left–right axis constitution depends on cell differentiation and function of cilia. Any failure in node cilia function can result in disturbance of left–right axis. Hence the recognition of situs inversus is important for prevention of surgical mistakes which can occur due to nonrecognition of situs inversus or atypical history. For

example, in a patient with situs inversus, acute cholecystitis will cause pain in left upper quadrant and appendicitis will cause pain left Illiac fossa, similar to our patient. In case of trauma external bruises and fracture over the ninth to eleventh ribs on the right side is at risk for splenic injury. So surgeons should be aware of these anatomical conditions.

Figure 1. Chest x ray showing situs inversus, dextrocardia, right sided gastric bubble, right sided aortic arc, left sided liver and bronchiectasis

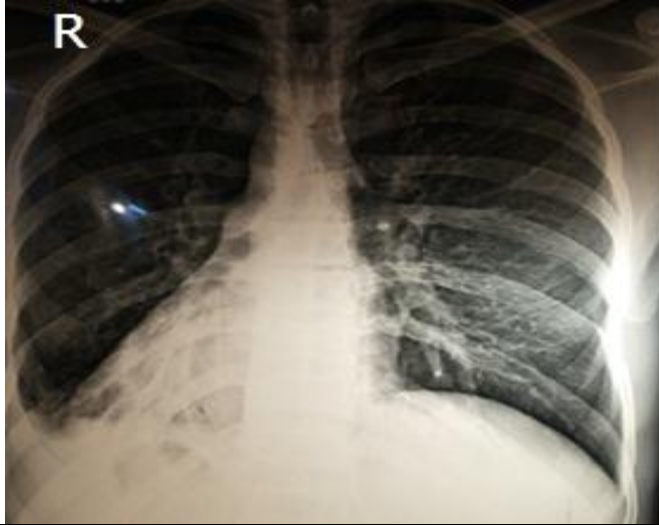


Figure 2. Intraoperative photographs of left Appendix



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