

A Case of Acute Appendicitis with Situs inversus Totalis Simulating Ureteral Colic

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URETER KOLİĞİNİ TAKLİT EDEN
SITUS İNERSUS TOTALIS'LI
BİR AKUT APANDİSİT VAKASI

Geliş Tarihi: 22 Ağustos 1985

SUMMARY

This report presents a patient who had been seen at the Casualty Department of Trabzon City Hospital, with an acute appendicitis in a situs inversus totalis of the organs involved. The preliminary diagnosis was a left sided ureteral colic. This case closely simulated ureteral colic due to the left sided localization of the appendix, only anterior, to the ureter and posterior to the caecum. Pathological urine laboratory findings resulted from the involvement of the ureter with the inflamed appendix at the point of touch.

Key Words: Situs, inversus totalis, Acute appendicitis.

T. Kl Tip Bil Aras Dergisi C.4, s. 1-2, 1986, 147-148

Situs inversus totalis (SIT) is an uncommon congenital disorder. The incidence of this anomaly ranges between 1:1400 - 1:35000 in the reported series (1, 2, 3). Furthermore, acute appendicitis with situs inversus totalis is even a more scarce, interesting pathological condition in clinical practice. Collins reported 17 cases with SIT of abdominal viscera and 11 cases with SIT out of his seventy-one-thousand acute appendicitis cases; corresponding to 0.024% and 0.016% respectively with an overall incidence of 0.04% (3). Along with their two patients, Carmichael and Gale reported a total of 88 cases in 1979 (2). In the same report, it is further mentioned that the abdominal situs was not well defined in 45 of the cases.

CASE REPORT

A sixteen years old girl was admitted to the casualty department of Trabzon City Hospital because of severe abdominal pain. It was her second admission. At her first admission on the day before,

ÖZET

Bu yazıda Trabzon Devlet Hastanesi Acil Servisinde karşılaşılan önce sol üreler kolığı tanısı almış, ilgili organların situs inversus totalis'i ile birlikte bulunan bir akut apandisit olgusu sunulmaktadır. İlgili olgunun üreler kolığını şiddetle taklit etmesi, apandiks'in solda, retroçekal ve sol ürelerin üzerinde yerleşmiş olmasından köken almaktadır. Temas noktasında ürelerin de inflamasyona katılması patolojik idrar bulgusuna yol açmaktadır. Tanı yanlışlarından ve gecikmeden sakınmanın yegane yolu, sistemik muayene alışkanlığının önemini asla küçümsememektir.

Anahtar Kelimeler: Situs inversus totalis, Akut apandisit

T J Research Med Sci V. 4, N. 1-2, 1986, 147-148

she was complaining of Left Lower Quadrant (LLO) abdominal pain radiating to the ipsilateral lumbar region. The pain was continuous, dull in character and she complained of cramping episodes. She had had similar complaints in the previous year when she had been treated for urinary tract infection twice. During his present illness she had not lost her appetite. She neither vomited nor had a bowel problem. She complained of a mild pain on urination. There was no abnormality in her gynecological history. She was afebrile. The early examination revealed a blood pressure of 120/80 mmHg. and a pulse rate of 86; minute. While her abdomen was not distended and soft, there was a slight tenderness in her LLO without guarding, spasm or rebound. There was no palpable mass and the bowel sounds were normal. Percussion revealed a most tender left costo-vertebral angle. Her white blood cell count was 6000/mm³ and her urine contained 10 red and 8 white cells at each high power field. There was no albuminuria. These findings suggested an ureteral colic, so she was sent home

for further evaluation a day later with nonspecific antibiotics and analgesics.

When she was seen at her second admission two days later, her pain had become more intense. She was anorectic, vomited for several times and had fever and chills. On examination she appeared acutely ill, with an axillary temperature of 39°C and a pulse rate of 110/minute. A systematic thorough examination was carried out by the senior surgeon who diagnosed a right sided heart suggesting the possibility of situs inversus totalis. This finding was further enhanced by radiological demonstration of "the dextraposition of the heart and gastric fundus. The LLO of the abdomen had become very tender with muscle guarding and rebound tenderness. Although it was difficult to palpate the tender abdomen, a suspicious mass was felt deep in the left iliac fossa, only after bimanual rectal and abdominal examination.

She was hospitalized immediately, with a diagnosis of acute appendicitis and periappendicular abscess. Preoperative resuscitation comprised of intravenous fluid and electrolytes and antibiotic cover. The laparotomy revealed an inflammatory

mass located behind the caecum. This mass was opened and the pus inside it aspirated. Appendicectomy was done after a gentle dissection. The cavity was drained through a soft rubber drain and the abdomen was closed per primum. She had a relatively uneventful recovery, where on the third day her fever subsided and two weeks later the drain was removed. She was discharged on the seventeenth postoperative day.

DISCUSSION

Acute left lower quadrant abdominal pain should involve the differential diagnoses of such diseases as Meckel's diverticulitis, Crohn's disease, ulcerative colitis, left sided acute appendicitis, etc., no matter how young the patient be. Furthermore, it would be best to note that, not only acute appendicitis but diseases such as acute cholecystitis and even acute myocardial infarction may also develop in situs inversus totalis cases (2, 3).

The four major anatomical causes of left sided appendices include various degrees of bowel malrotation, an extremely mobile caecum, an extremely long appendix and finally situs inversus totalis (1,2,3).

LITERATURE

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