

OBSTRUCTIVE APPENDICITIS CAUSED BY A DEAD ROUND WORM

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A 22 years old female Afghan refugee presented with one year history of recurrent right lower quadrant pain, which used to be colicky at times, associated with anorexia and nausea. No history of vomiting, diarrhoea or urinary symptoms. Investigations like haemoglobin, haematocrit, total white cell count, differential leukocyte count, erythrocyte sedimentation rate, urinalysis, liver and renal function tests were all within normal limits. Plain X-rays of abdomen and chest were normal. Intravenous urogram and abdominal ultrasonography did not reveal any abnormality. In view of persistent discomfort and interference with the life style of the patient it was decided to do an exploratory laparotomy. Via a small right paramedian incision a full laparotomy revealed all viscera to be normal. The appendix was fairly long (about 8 inches) and it felt very rigid. On deep palpation a long thin hard mass was felt in the lumen of the appendix separate from its wall. Appendix was opened at its base with a small scalpel, at the site where normally appendix would be cut in conventional appendicectomy. A dead round worm was pulled out of the lumen of the appendix with the help of haemostat. Abdomen was closed in layers. The patient had an uneventful recovery and was allowed home on the third post operative day. Sutures were removed on the 8th post operative day. She was followed up in the

outpatient department at weekly intervals for more than three months and was found completely asymptomatic. The pain that she used to have before operation had completely gone.

DISCUSSION

The diagnosis of appendicitis is not easy in females. This is because pelvic inflammatory disease is a fairly common condition and its differentiation from appendicitis can be difficult. Frank reported an incidence of negative laparotomy-appendicectomy of approximately 40% in female patients in 1975.¹ In 1985 a prospective study by Bongard et al with better understanding of clinical features and investigations, still resulted in 15% of negative laparotomy-appendicectomy.¹ The etiology of appendicitis is very variable. Two main types are recognised: obstructive and non-obstructive. Obstructive type is caused by lymphoid hyperplasia, faecoliths, malignancies and worms. Infestation of the appendix by *ascaris lumbricoides* is known for a long time.² Appendix can also be the site of other pathological conditions. Isolated Crohn's of appendix is a rare occurrence, Vanek et al reported two such cases in 1988.³ Appendix is the most common site for the carcinoid tumour of the gastrointestinal tract. Anderson and Wilson reported an incidence of 0.5% in 26877 appendicectomies in 12 years period.⁴

Appendicitis may occur in a condition called meconium ileus equivalent. This condition affects adults with cystic fibrosis where the lumen of the appendix is obstructed by abnormally viscid mucofaecal material.⁵ Kikuchi's disease, where severe necrotizing lymphadenitis of cervical lymph nodes was described by Kikuchi and Fujimoto in 1972, may present with features of appendicitis.⁶ Seven cases have been reported in the world literature of appendicitis caused by an intrauterine contraceptive device.⁷ AL-Kraida et al reported ova of schistosoma haematobium in the lumen of appendix of 15 cases out of total of 1920 patients who underwent appendicectomies in a period of 10 months.⁸

In our case recurrent right lower quadrant pain was caused by ascaris lumbricoides causing obstruction of the lumen of the appendix. This had been a chronic problem of more than a year duration, which resulted in weight loss and chronic ill health of the patient. The patient became completely asymptomatic after appendicectomy. As round worm infestation of the gastrointestinal tract is prevalent in our society, therefore, it is suggested that this may be considered in the differential diag-

nosis in patients who present with chronic ill health and persistent discomfort in the right lower quadrant of abdomen.

REFERENCES

1. Bongard et al. Differential diagnosis of appendicitis and pelvic inflammatory disease. *Am J Surg.* 1985; 150: 90.
2. Rains AJH and Mann CV. The vermiform appendix, Acute appendicitis, Etiology. *Short practice of Surgery.* 20th Ed: 1988; 1092.
3. Vanek et al. Isolated Crohn's Disease of the appendix. *Arch surg* 1988; 123: 85.
4. Anderson JR and Wilson BG. Carcinoid Tumours of the appendix. *Br J Surg.* 1985; 72: 545.
5. Rimmer JAR et al. Appendicitis complicating meconium ileus equivalent. *Br J Surg.* 1989; 75: 168.
6. McLoughlin J et al. Kikuchi's disease simulating acute appendicitis. *Br J Surg.* 1988; 75: 1206.
7. Serra I. Appendicitis caused by an intrauterine contraceptive device. *Br J Surg.* 1986; 45: 927.
8. AL-Kraida A et al. Appendicitis and schistosomiasis. *Br J Surg.* 1988; 75: 58.