MECKEL’S DIVERTICULUM: A VESICO—DIVERTICULAR FISTULA

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THE complications of Meckel’s diverticulum have often presented a challenge in both diagnosis and treatment. The symptoms of the diseased diverticulum are not specific to it alone, but rather are characteristic of the type of pathological process occurring in it or in relation to it. We report on a patient who developed a fistula between an inflamed Meckel’s diverticulum and the urinary bladder.

CASE REPORT

An otherwise healthy 81 year old female presented with a two week history of intermittent, severe pain in the right iliac fossa associated with dysuria, frequency, nausea and vomiting. The only relevant past history was of appendicectomy 40 years previously.

On examination she was pyrexial (37.5°C) with tenderness in the right iliac fossa but no guarding or rebound tenderness; rectal examination revealed no abnormality. A provisional diagnosis of right ureteric colic seemed substantiated by finding blood in the urine; however, intravenous pyelography showed no stone or other renal pathology. Initial urine examination showed large numbers of pus cells but no growth on culture. Her symptoms failed to settle and a barium enema demonstrated extensive diverticular disease of the descending and sigmoid colon.

Vaginal examination revealed an irregular, firm, right-sided pelvic mass which was not uterine or ovarian and was considered to be of diverticular origin.

Treatment with metronidazole, ampicillin and a high roughage diet resulted in an improvement in the patient’s symptoms and she was allowed home. Just prior to her discharge one urine culture had shown a significant growth of coliforms, which responded to co-trimoxazole.

At review six weeks later she again complained of dysuria with foul smelling urine and culture showed a heavy coliform infection. A vesico-colic fistula, possibly caused by pelvic diverticulitis, was suspected and a micturating cystogram showed tethering of the right side of the bladder to an adjacent structure but no leakage of contrast into the bowel; cystoscopy revealed an irregular, indurated area on the right supero-lateral wall of the bladder. At laparotomy an inflamed Meckel’s diverticulum was found, adherent to the bladder, with a fistula between the two. The fistula was excised, the bladder repaired and a Meckel’s diverticulectomy performed.

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The patient made a satisfactory recovery and has since been asymptomatic. Histology confirmed the operative findings and stated that although the Meckel’s diverticulum was inflamed it did not contain heterotopic mucosa.

COMMENT

Although Meckel’s diverticulum occurs in only 1-2 per cent of the population it is the most common congenital abnormality of the gastro-intestinal tract!

Disease arising in Meckel’s diverticulum commonly presents in infancy and is rarely seen in adult life. Fistula formation between adjacent hollow organs is common with colonic diverticular disease but this complication from an inflamed Meckel’s diverticulum does not seem to have been recorded in the English literature.

There was no obvious reason why this patient should develop inflammation in the Meckel’s diverticulum at this late stage and such a diagnosis was not entertained as gross pelvic diverticular disease was not present. The diagnosis was only made at laparotomy, with complete cure effected by excision of the diverticulum and closure of the bladder defect.

Although this complication of Meckel’s diverticulitis is extremely rare, it’s occurrence might support the view that a Meckel’s diverticulum discovered incidentally at laparotomy should be excised.

SUMMARY

A previously healthy 81 year old female presented with pyrexia, pain in the right iliac fossa and recurrent urinary tract infections. Laparotomy revealed an inflamed Meckel’s diverticulum adherent to the bladder, with a fistula between the two. This is a rare complication of Meckel’s diverticulum, apparently not previously described in the English literature.

REFERENCES

1 Schwartz AD. Meckel’s diverticulum. Amer J Surg 1956; 92: 486-489.
2 Case TC. Meckel’s diverticulum in an adult. J AM Geriat Soc 1971; 19: 649-51.
3 Taneja OP. Taneja S. Diseases of Meckel’s diverticulum. Arch Surg (Chicago) 1965; 90: 349-57.