IRRITABLE HIP AND CAMPYLOBACTER INFECTION
DAI ANTHONY JONES

From the Morriston Hospital, Swansea

Three cases are reported which presented as “irritable” or “observation” hips and failed to respond to rest at home and in hospital. In each case a campylobacter organism was grown from the faeces; none were found in a group of 20 patients in the paediatric ward for other reasons. The patients responded to a course of erythromycin. It is postulated that they may have had a reactive arthropathy of the hip and suggested that cultures for Campylobacter be made as part of the investigation of irritable hip.

The condition known as “irritable hip”, “observation hip”, coxalgia or transient synovitis has well known features which have been summarised by Lloyd-Roberts and Ratliff (1978). Harding (1970) searched for an aetiological factor but his thorough investigation of 65 patients led him to conclude that he had failed to establish “any connection with infection by staphylococci or streptococci, with allergy, with viral infection and with trauma”. He made no reference to persistence or recurrence; it appears that all his cases had completely resolved by the 17th day. Valderrama (1963) does discuss the late sequelae; he describes eight patients who had symptoms for between three months and three-and-a-half-years. Adams (1963), mentions four cases in which the course was benign but symptoms continued for three to 18 months.

It is recognised that a joint may react to an organism which is remote from it, but this association has not been made in relation to irritable hip. Such “reactive” arthropathies in other joints are well described in relation to Salmonella and Yersinia by Haslock (1978); and Berden, Muytjens and van de Putte (1979) describe a case of reactive arthropathy of the ankles associated with Campylobacter jejuni. Eight cases of reaction to this organism have been reported from Finland (Kosunen et al. 1980), leaving little doubt that this is a genuine clinical entity.

Three cases are now reported in which there was an association between persisting irritable hip and Campylobacter jejuni, though none of the patients had bowel symptoms.

CASE REPORTS

Case 1. An eight-year-old boy was admitted with a three-week history of intermittent ear-ache and sore throat.

The day before admission he had attended school but had limped.

On examination the only abnormality was a decreased range of movement of the left hip. A diagnosis of irritable hip was made and treatment was by traction.

After 20 days his symptoms had improved and he was discharged home non-weight bearing on crutches. Four days later he was re-admitted for a further three weeks; a bone scan revealed slightly increased activity in the region of the left hip. A paediatrician prescribed aspirin on a symptomatic basis, there being no evidence of rheumatoid arthritis. During a third admission three weeks later a viral disorder was excluded but Campylobacter was isolated from the stools.

A six-week course of erythromycin was started and after another three-week period of traction most of the spasm had resolved and he was mobilised.

By six months after the onset the clinical problem was resolving, stool cultures had become negative and one month later he was completely symptom-free. All radiographs, including one taken eight months after onset were normal and the patient was HLA B27 negative.

Case 2. An eight-year-old boy presented with transient pain in the right hip but no abnormalities on examination. Two weeks later he had pain in the left hip with a limp and restriction of movement. After two weeks traction in hospital he made a good recovery. Five months later and again 10 months later there were recurrences, the latter requiring admission for pain and slight restriction of hip movement. Radiographs and viral studies were normal, but he required two further admissions to hospital for rest and traction.

During the latest admission, two-and-a-half years after the first presentation, Campylobacter was cultured from the stools and isolated from blood cultures after 48 hours. He was treated with erythromycin for 10 days. After this he remained symptom-free for one year, but has since had two episodes of pain in the right hip with tender lymph nodes in the right groin. At present he has been symptom-free for three months and recent stool
Case 3. A boy aged five years presented with a typical irritable right hip, having had symptoms for six weeks. He did not respond to rest at home and was admitted for traction. Campylobacter was grown from his faeces and he was given a six-week course of erythromycin. Symptoms settled over four weeks and there has been no recurrence after four months. He was HLA B27 negative.

DISCUSSION

There has been recent interest in Campylobacter because of the causative association of Campylobacter pyloridis with gastritis and peptic ulceration (Axon 1986). Campylobacter jejuni is known to be an important intestinal pathogen (Skirrow 1986). Campylobacter enteritis is a zoonosis, the main reservoirs being domestic animals, poultry, and contaminated milk or water. The organisms can be readily cultured from the surface of poultry bought at most retail outlets and a few hundred organisms constitute an infective dose.

The three cases described all presented with fairly typical irritable hips and were not pyrexial or unwell at any stage. Their sedimentation rates were normal. All investigations including radiography, bone scanning, haematological, virological and serological tests were negative. These included complement fixation tests for influenza A, influenza B, psittacosis, adenovirus, respiratory syncytial virus, mycoplasma pneumoniae, mumps V, mumps S, and herpes simplex, the Paul Bunnell test, HA screen test, and rubella HAI antibody titre. All three patients were HLA B27 negative.

None of the patients responded completely to simple traction and two had several hospital admissions, during which they were seen by consultant paediatricians who excluded other medical conditions. With the first two patients a psychiatric opinion was being considered before the campylobacter organism was cultured. The third patient, with a shorter history, might have had a similar course if specific tests for the campylobacter organism had not been made.

It is important to realise that faeces are not cultured specifically for this organism unless specially requested, so the diagnosis is unlikely to be made by routine checking of "everything". Ideally, we should have demonstrated specific serum agglutinins against Campylobacter jejuni but such specific immunological tests were not available at the time. Synovial biopsies and joint aspirates for immunochemistry and histology were also considered, but since the children were otherwise well, the small risk of invasive investigation was not taken.

To establish the significance of the isolation of a campylobacter organism the stools were examined of 20 patients of a similar age who had been admitted for unrelated conditions excluding diarrhoea. In none of these cases, was Campylobacter isolated. It is accepted that in these three cases an aetiological association is not proved, but it is strongly suggested and it is now our routine to culture the stools of children with an irritable hip even when there is no history of gastrointestinal symptoms.

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REFERENCES


