

## **Epidemiological and clinical features of Brucella arthritis in 24 children.**

Zamani A, Kooraki S, Mohazab RA, Zamani N, Matloob R, Hayatbakhsh MR, Raeskarami SR. Department of Pediatrics, Imam Khomeini Hospital, Tehran, Iran.

### **Abstract**

#### **BACKGROUND AND OBJECTIVES:**

Brucellosis is considered the leading zoonotic disease of the Middle East. The disease has a wide spectrum of clinical manifestations and can result in complications with severe morbidity. The aim of this study was to evaluate the frequency, distribution and characteristics of arthritis in Iranian children with brucellosis.

#### **DESIGN AND SETTING:**

A retrospective descriptive study conducted in a referral children center in Tehran from 1997 to 2005.

#### **PATIENTS AND METHODS:**

Arthritis in children with brucellosis who were admitted to a specialized hospital was detected by clinical signs of the involved joint(s) and characteristics of joint fluid aspiration. Socio-demographic information was recorded.

#### **RESULTS:**

Of 96 patients diagnosed with brucellosis, 24 (25%) had Brucella arthritis 14 (58.3%) males and 10 (41.7%) females. Most common manifestations were fever in 21 patients (87.5%) and fatigue in 18 patients (75%). Monoarthritis was recorded in 15 patients (62.5%) of the cases with involvement of the knee in 8 (45%) and hip in 5 (29%), the ankle in 2 (8%) patients while 9 (37.5%) patients suffered from polyarthritis. None of the patients had axial joints involvement. Seventy-five percent of the subjects (18 patients) were from urban areas and 66.7% (16 patients) had consumed un-pasteurized cheese. Recurrence was not seen in any of the 24 patients who received a combination of co-trimoxazole for 6 weeks and gentamicin for 5 days.

#### **CONCLUSION:**

Childhood brucellosis is a challenging disease in Iran that has serious complications like arthritis. Therefore all physicians who work in endemic areas should be familiar with this disease and consider the possibility of brucellosis in all children who present with arthritis and arthralgia.