



POSTER PRESENTATION

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PReS-FINAL-2258: Final diagnoses of pediatric patients presenting with musculoskeletal symptoms in a center from the eastern Mediterranean

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Introduction

Complaints related with musculoskeletal system are frequent in children and adolescents.

Objectives

To identify the clinical and laboratory features in children and adolescents suffering from musculoskeletal complaints (excluding acute traumatic conditions) in a tertiary referral center in Central Anatolia; and to define etiology and clues for differential diagnosis.

Methods

All children [n: 422; mean age 7.90 ± 3.95 (range: 4 mo.- 18 years); 48.2% female] presenting to the outpatient clinic for the first time due to pain, swelling or limitation of movement attributed to musculoskeletal system in a 6 month period were enrolled. Demographical features, duration, and type of complaints, physical signs on initial presentation and laboratory findings [a complete blood count, erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP)] were recorded.

Results

Etiology was identified in 97.2% (n: 410) of the cases and were classified as follows: non-inflammatory and mechanical conditions (NIMC, n: 178; 42.2%), rheumatologic diseases (RD, n: 131; 31%), infection related disorders (IRD, n: 91; 21.6%) and malignancy (M, n: 10; 2.4%). NIMC group was characterized with longer duration of complaints, higher rate of non-articular complaints, lower rate of joint involvement, limping and lower levels of leukocytes, ESR, and CRP ($p < 0.001$).

Rate of rheumatic disease was higher in >12 years of age group, compared to younger ones ($p: 0.005$). On the contrary younger age group was associated with higher rate of IRD group ($p: 0.007$). Small joint involvement was highest in RD group (16.8%), compared to other groups ($p < 0.05$). Rate of IRD was highest when the duration of complaints was less than 7 days, compared to the other groups ($p < 0.05$). Rheumatic disease had the lowest rate among patients with duration of complaints less than 7 days compared to the other three groups ($p < 0.05$). Familial Mediterranean fever (9.7%), juvenile idiopathic arthritis (8.3%) and Henoch-Schönlein purpura (5.7%) were the most frequent rheumatologic diseases. Median ESR levels in RD and M groups were higher, compared to IRD and NIMC groups ($p < 0.05$ respectively). Although mean ESR levels were comparable among M and RD groups, the frequency of patients with ESR levels ≥ 60 mm/hr were higher in M group (60%), compared to RD (20.6%; $p < 0.05$) group.

Conclusion

Rheumatologic diseases accounted approximately one third of the etiology among children and adolescents admitted with non-traumatic musculoskeletal complaints. Age, duration of complaints, pattern of joint involvement, and acute phase reactants are practical tools for the differential diagnosis.

Disclosure of interest

None declared.

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