

SUMMARY AND CONCLUSION

Disturbances of growth are characteristic features of arthritis in children,

Anthropometry appears to be of greatest value as it detects deviations from the usual pattern characteristic of the growth period.

This work aimed to identify the patterns of growth among children with JRA particularly the segmental growth, and to compare the growth of the patients group with that of the control group and the standard.

To achieve this aim, a cross sectional study was carried out upon 40 patients with JRA (27 females and 13 males) ranged in age between three years and one month to eighteen years with a mean age of 11.85 years and 30 healthy individuals as a control group (19 females and 11 males) ranged in age between three years and one month to eighteen years with mean age of 10.97 years attending the out patient clinic of Banha and Kasr EL-Eini university hospitals Each child in studied groups was subjected to the following examination : -

- All patients were subjected to full history taking, thorough clinical examination, and routine investigations to

confirm the diagnosis according to the American Rheumatism Association criteria.

- The control group were subjected to full history taking and thorough clinical examination to exclude any individual suffering from any chronic disease .
- Assessment of growth through measurements of the following parameters : - Weight, height, sitting height, span , upper limb measurements (total length, upper arm length, forearm length, hand length and breadth) and lower limb measurements (total length, leg length tibial length and foot length and breadth).
- It was observed that the mean weight in the patients group was 29.01 ± 9.71 Kg., while it was 36.52 ± 14.62 in the control group and there was statistical significance of difference between them. The range of the weight of the patients was 11-52kg., while it was 17-65 kg. in the control group. Also, the weight of the patients was below the 5th centile in 24 patients (60%), while that of the control group was within normal limits (>5th - 95th centile) even above the normal limits (95th centile) in 3 cases (10%) and no any one of the control group lies below the 5th centile (0%).

While, as regard to the height, we noticed that the mean height of the patients was 131.0 ± 20.54 , while it was

138.57 \pm 17.8, and the difference did not reach statistical significance. ^{control} Also, the range of the height of the patients was 79.5-160 cm., while it was 96.5-166 cm. in the control group. We observed that, the height of the patients was below the 5th centile in 23 patients (57.5%), while that of the control group was within the normal limits (>5th - <95th centile) except 3 individuals (10%) was above the 95th centile.

- It was observed that, the growth of the female patients more affected than male patients especially the weight and span, where the difference was statistically significance for female patients but not for male patients.

When we classified the patients according to their mode of onset we observed that :-

- The mean age was 8.41 \pm 3.59 , 12.63 \pm 3.51 and 14.5 \pm 3.33 years for systemic , pauciarticular and polyarticular onset respectively, also, the mean of weight was 21.13 \pm 6.05, 32.65 \pm 9.81 and 34.17 kg and the mean of height was 116.9 \pm 18.79 , 131.81 \pm 19.755 and 143.05 \pm 14.36 cm. and all the above differences were highly statistical significance .

- In patients with systemic onset (15 patients), both weight and height were below the 5th centile in 7 cases (46.67%) for each of them .