

Oral presentation

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## Screening for preadolescent and adolescent Idiopathic Scoliosis of the spine in a Greek ROM population

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### Background

Previous school screenings in Greece showed a prevalence of Id. Scoliosis similar to other countries in Europe, America and Asia averaging 1, 5-3% for curves  $\geq 10^\circ$ . A complete absence of ROM children with scoliosis was noted in contrast to such admissions for other orthopedic ailments.

### Objective

The present screening is an attempt to investigate prevalence of Id. Scoliosis in ROM children and if found substantially lower than usual, to seek an explanation for this favorable aberration.

### Methods

The Screening was materialized in the years 2002 to 2006 at ROM encampments in Attica and Peloponnesus. With the clinical bending test and demographic data recording, we examined 790 children, 400 boys and 391 girls (191 aged 6–8 y and 599 from 9 to 17 y). All children with positive clinical test had X-Ray of the spine the same day.

### Results

Of 790 children, 30 had positive test initially. A second examination left 20 children (2.5%) for radiography. Some showed atypical and unstable spine deviations or incomplete curves without rotation. Three girls with prominent humps had normal X-Rays. Two girls 7 and 11 y. old with rib hump had  $10^\circ$  and  $12^\circ$  right Thoracic curve with minimal rotation. Therefore 2 girls of 790 children had minor scoliosis (0.25%).

### Conclusion

This study shows definitely reduced prevalence of Id. Scoliosis among the usually dark skinned ROM children (0.25%). Screenings in S. Africa showed low scoliosis prevalence in black people (0.03%). A multi ethnic screening from Singapore showed a 2.5% prevalence among fair skinned Chinese girls and 1% in dark skinned Indian and Maley girls. Our original screening in Athens (1979) showed children of dark complexion to be more resistant, than fair skinned blond children to the development of scoliosis. ROM people in Greece remain a race genetically separate from ethnic Greeks although established here many centuries ago. This population is ideal for genetically related ailments like Id. Scoliosis.

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