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## Oral health status among children suffering from juvenile rheumatoid arthritis

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**Objective:** To investigate the oral health status and related concomitant disease in children with juvenile rheumatoid arthritis (JRA).

**Setting:** The study was conducted at the Pediatric Department of the University Clinical Center of Kosovo in Prishtina, in order to improve the oral health care awareness among patients suffering from JRA and their parents.

**Study Design & Methods:** A group of 29 children suffering from JRA age 7 to 15 are included in this prospective study. Healthy control group is consisted of 29 school children. Assessment of oral health awareness questionnaire was distributed to the parents/guardians. Oral examination was performed to determine scores for gingival index (GI), plaque index (PI) and dmft/DMFT index. Conventional orthopantomographic (OPT) images are done to examine the condition of the temporo-mandibular joint (TMJ) and to identify potential dental/oral focuses. In older children, age 8 and above the overall health status was measured using Stanford Health Assessment Questionnaire (HAQ).

**Results:** There was no significant difference in dmft scores of study and control group ( $2.27 \pm 2.58$  and  $1.94 \pm 2.12$  respectively) and DMFT scores of study and control group ( $1.55 \pm 1.69$  and  $1.89 \pm 2.19$  respectively). The average  $\pm$  SD gingivitis score was significantly greater in the children suffering from JRA  $33.8 \pm 20.8$ , compared with control group,  $22.12 \pm 11.2$ ,  $p < 0.0001$ . A significantly greater mean plaque score related to permanent teeth was observed in children with JRA  $88.3 \pm 38.6$ , compared with the control group  $121.6 \pm 49.5$ ,  $p < 0.0001$ . In 11% of children suffering from JRA, TMJ disorders were identified. The most frequent concomitant disease in the study group was chronic tonsillitis (23%); whereas in the control group acute bronchiolitis was predominant (11%). Disability Index scores from questionnaires distributed to older children ( $>8$  years) and their parents/guardians was 0.79 ( $n=23$ ;  $P < 0.001$ ), demonstrating that parents can precisely report for their children. Reliability, of Child HAQ evaluated by test-retest and internal reliability was excellent, and demonstrated strong correlations of disability index, pain and morning stiffness.

**Conclusion:** Our data suggested that there is an ongoing necessity for improving the oral hygiene of patients suffering from JRA, and to concentrate the efforts of dental professionals on a preventive method and to provide proper dental care and education of patients and their parents/guardians.

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