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**STIMULATED WHOLE SALIVA MEASUREMENT IN  
CHILDREN RECEIVING CANCER THERAPY**

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ABSTRACT

The purpose of this case-control clinical study was to determine whether children receiving cancer therapy present lower levels of saliva when comparing with healthy children.

42 pediatric patients were divided in two groups: GROUP A (CONTROLS) consisted on 21 healthy children (10 females, 11 males; mean age= 8.8 years, s.d. = 3.4;). GROUP B (CASES) consisted on 21 children receiving cancer therapy (12 females, 9 males; mean age= 8,6, s.d. 3,6) extracted from their respective populations.

Patients were asked to chew a 1 cm<sup>2</sup> wax piece for exactly 60 seconds to stimulate saliva Flow, and then to expectorate the accumulated saliva into a disposable plastic receiving vessel. Saliva level was measured for each patient using a double measurement with plastic syringe calibrated to 0,1 ml. For each group, SWS means ( $X_1$  and  $X_2$ ) were calculated. In GROUP A,  $X_1 = 1,34$  ml/min (s.d. = 1,49) and in GROUP B the  $X_2 = 0,91$  ml/min (s.d. = 1,14). A Student-t test was performed and results show that both means are not equal ( $p < 0,01$ ).

In conclusion, when the values of SWS levels in children receiving cancer therapy are compared with the values of healthy children, the differences are significant ( $p < 0,01$ ). A program of prevention and clinical management of oral complications following chemotherapy and radiation therapy should be implemented for children with cancer.