

## **THE STANDARDS OF TONSIL SIZE IN ULTRASOUND EXAMINATION AMONG CHILDREN WITH RESPIRATORY DISEASES.**

Łukasz Gojny<sup>1</sup>, Mateusz Łasecki<sup>2</sup>, Mateusz Patyk<sup>1</sup>, Cyprian Olchowy<sup>2</sup>, Urszula Zaleska-Dorobisz<sup>2</sup> and Iwona Pirogowicz<sup>3</sup>

<sup>1</sup>Student Scientific Club of Health Promotion and Disease Prevention, Hygiene Department, Wrocław Medical University, ul. J. Mikulicza-Radeckiego 7, 50-435 Wrocław, Poland, gojny.lukasz@gmail.com

<sup>2</sup>Radiology Department, Wrocław Medical University, Poland

<sup>3</sup>Hygiene Department, Wrocław Medical University, Wrocław, Poland

**Introduction:** Tonsils ailments are of a great clinical importance, especially in paediatrics and laryngology. Current studies of children' cases confirmed previous observations indicating that inflammation of tonsils and undergone tonsillectomy, may increase the risk of neoplastic diseases, particularly lymphomas. These tonsillar tumours, in addition to sarcomas, they are considered to be the most common malignant diseases of the oropharynx among adults. It's very important to detect even the small pathology in child's tonsils in order to prescribe the accurate and successful treatment.

**Objective:** The aim of the study was to estimate the average size of the palatine tonsils among children with respiratory tract diseases.

**Material and Methods:** The study was performed on a group of 164 children undergoing a rehabilitation period in Szklarska Poręba in July 2013 and July 2014. Before the ultrasound examination, patients' tonsils were evaluated by Brodsky' scale. Then their size and symmetry were evaluated. Every patient underwent the jugulodigastric lymph nodes evaluation, including appearance, size and vascularity.

**Results:** Mean sizes of tonsils were estimated, relating to age and gender. The average sizes of the tonsils were: 2,93 ml for the left and 3,20ml for the right tonsil and 3,67ml for the left, 3,60ml for the right in control. The ultrasonographical results showed strong correlation with the Brodsky scale evaluation for right tonsil(0,59) and left tonsil(0,49).

**Conclusion:** The additional ultrasonographic examination may be helpful in the appropriate tonsil's diagnosis. Further investigation of the possible correlation with applied pharmacological treatment should be held.