

Radiology and Radiation: How and Why Should we Reduce Exposure Rates in the CT Imaging of the Nose and Paranasal Sinuses?

Ramming J* and Ramming M

ENT Specialist, Private Aesthetic and Laser Institute, Germany

*Corresponding author: Ramming J, ENT-Specialist, Lasersurgeon, Private Cone Beam CT Radiologic Institute, Private Aesthetic and Laser Institute, Spitalstr 32, 97421 Schweinfurt, Germany, Tel: 049972127087; E-mail: ramming@ramming.de

Received date: March 17, 2016; Accepted date: April 29, 2016; Published date: April 30, 2016

Copyright: © 2016 Ramming J. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Citation: Ramming J, Ramming M (2016) Radiology and Radiation: How and Why Should we Reduce Exposure Rates in the CT Imaging of the Nose and Paranasal Sinuses?. Otolaryngol (Sunnyvale) 6: 232. doi:10.4172/2161-119X.1000232

Purpose

The diagnostic imaging of the nose and the paranasal sinuses by Cone Beam Computed Tomography (CBCT) is now a standard procedure in ENT. In comparison to the standard medical CT there is a recent gain of information accompanied by extremely low radiation doses. Our purpose is to evaluate the differences in diagnosis and exposure rates between these radiologic methods also in comparison to the so called natural and environmental factors.

Methods

First we show the diagnostic advantages of the CBCT in comparison to the standard conventional CT. Then we compare the exposure rates of the standard CT with those of the CBCT also referring to natural and environmental factors due to their importance. We also discuss the role of so called 'low-dose-protocols' and the influence of scattered radiation in radiology. Important examples and clinical data underlining the special aspects are demonstrated.

Results

We can show a better profit for our nasal work using for diagnosis a CBCT. The great advantage from the radiological point of view is the

extremely low dose of radiation of the CBCT in comparison to the standard medical CT and substantial less scattered radiation. In comparison to natural or environmental factors the exposure rates are negligible.

Conclusions

In our belief the cone-beam computed tomography (CBCT) is a very useful tool in the diagnosis of sinusitis, especially concerning the exposure of radiation.

Acknowledgement

This was presented in the Oral Presentation 55th Annual Meeting of the Irish Otorhinolaryngology, Head and Neck Society, Lough Eske Castle, Donegal Lough Eske, Ireland, 2014, Abstract and Oral Presentation.