

Sussex Research

Dental x-rays and the risk of thyroid cancer and meningioma: a systematic review and meta-analysis of current epidemiological evidence

Anjum Memon, Imogen Rogers, Priyamvada Paudyal, Josefin Sundin

Publication date

09-06-2023

Licence

This work is made available under the All Rights Reserved licence and should only be used in accordance with that licence. For more information on the specific terms, consult the repository record for this item.

Document Version

Accepted version

Citation for this work (American Psychological Association 7th edition)

Memon, A., Rogers, I., Paudyal, P., & Sundin, J. (2019). *Dental x-rays and the risk of thyroid cancer and meningioma: a systematic review and meta-analysis of current epidemiological evidence* (Version 1). University of Sussex. https://hdl.handle.net/10779/uos.23472164.v1

Published in

Thyroid

Link to external publisher version https://doi.org/10.1089/thy.2019.0105

Copyright and reuse:

This work was downloaded from Sussex Research Open (SRO). This document is made available in line with publisher policy and may differ from the published version. Please cite the published version where possible. Copyright and all moral rights to the version of the paper presented here belong to the individual author(s) and/or other copyright owners unless otherwise stated. For more information on this work, SRO or to report an issue, you can contact the repository administrators at sro@sussex.ac.uk. Discover more of the University's research at https://sussex.figshare.com/

Figure Legends

- 1. Figure 1. PRISMA flow diagram for study selection
- Figure 2. Random effects meta-analysis of the association between exposure to dental x-rays and the risk of thyroid cancer

Risk Ratios (RRs) for each study are presented as squares, with the position of the square corresponding to the risk estimate and the 95% confidence interval (95% CI) shown by horizontal lines. 95% CIs for each study shown in the forest plot are obtained by back transformation using the calculated standard error used in the analysis and do not always conform exactly to the stated CIs in the paper. The area of the square is inversely proportional to the variance in the RR. The diamond represents the pooled RR and corresponding 95% CI. Heterogeneity: l^2 =59.5%, p=0.019.

Figure 3. Random effects meta-analysis of the association between exposure to dental x-rays and the risk of meningioma

Risk Ratios (RRs) for each study are presented as squares, with the position of the square corresponding to the risk estimate and the 95% confidence interval (95% CI) shown by horizontal lines. 95% CIs for each study shown in the forest plot are obtained by back transformation using the calculated standard error used in the analysis and do not always conform exactly to the stated CIs in the paper. The area of the square is inversely proportional to the variance in the RR. The diamond represents the pooled RR and corresponding 95% CI. Heterogeneity: l^2 =72.8%, p=0.013.

4. Figure 4. Random effect meta-analysis of the association between exposure to dental x-rays and the risk of glioma

Risk Ratios (RRs) for each study are presented as squares, with the position of the square corresponding to the risk estimate and the 95% confidence interval (95%CI) shown by horizontal lines. 95%CIs for each study shown in the forest plot are obtained by back transformation using the calculated standard error used in the analysis and do not always conform exactly to the stated CIs in the paper. The area of the square is inversely proportional to the variance in the RR. The diamond represents the pooled RR and corresponding 95% CI. Heterogeneity: I^2 =58.5%, p=0.005.