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

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

Figure Legends

1. Figure 1. PRISMA flow diagram for study selection

2. 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: I^2=59.5%, p=0·019.

3. 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: I^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.