Scientists link dental X-rays to cancer

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LONDON, UK/LEIPZIG, Germany: A joint research team from Kuwait and the UK has reported a link between dental X-rays and increased numbers of thyroid cancer. After factoring X-rays taken of 500 patients in a hospital in Kuwait, they found that men and women who had had up to four dental X-rays were more than twice as likely to have developed the disease than those who had never had any dental X-rays. For those patients who had had between five and nine X-rays, their risk rose more than four-fold.

Although thyroid cancer is one of the least deadliness cancers, incident rates have almost doubled in countries like Australia in recent years.

The findings are consistent with previous reports of increased risk of thyroid cancer in dentists, dental assistants, technicians and X-ray workers, suggesting that sensitivity of the thyroid to radiation is not necessarily related to direct irradiation of that organ but to any exposure to ionizing radiation. Besides thyroid cancer, significant risks have been also observed for leukaemia and cancers of the breast.

The researchers warned that the results of their study “should be treated with caution” because the data was based on self-reporting by the participants and the fact that other factors could be contributing to the increase in thyroid cancer cases. Further research is required to confirm the exact effect of dental X-rays, they added.

“It is important that our study is repeated with information from dental records, including frequency of X-rays, age and dose at exposure,” Dr Anjum Memon, Senior Lecturer and consultant in Public Health Medicine at Brighton and Sussex Medical School, who led the study, said. “If the results are confirmed, then the use of X-rays as a necessary part of evaluation for new patients, and routine periodic dental radiography, particularly for children and adolescents, will need to be reconsidered, as will a greater use of lead collar protection.”

(Edited by Daniel Zimmermann, DTI)

Dental assistant looking at an X-ray. New research is questioning current guidelines that state low-dose radiation exposure through dental radiography is safe. (DTI/Photo Dmitriy Shironosov)

Significant growth in lab market

According to a new report, the world market for dental laboratories is projected to exceed US$14.5 billion by the year 2015.

The study released by Global Industry Analysts, Inc., a US-based publisher of market research, states that dental laboratories are witnessing significant growth, owing to the rise in the ageing population and the subsequent demand for dental prosthetics and other restoratives. The report also cites the increasing purchasing power of the baby-boom generation as another factor driving the market.

Amongst others, the study analysed market data and statistics in terms of sales for Japan and other markets in the Asia-Pacific region.