

Radiation Exposure: Ocular Effects

Ionizing radiation (i.e. fluoro) causes ocular opacities and cataracts. The latency period of the development of these is inversely proportional to the radiation dose received. The radiation dose anesthesia providers receive to the head/eyes can be quite substantial, higher than other body parts, and often higher than the proceduralists. For this reason, leaded eyewear is recommended at all times.

It was previously taught that the development of cataracts and opacities was deterministic, that is it did not occur below a certain "threshold" dose and its occurrence could be accurately predicted based on lifetime cumulative dose. However it is newly felt that development of cataracts and opacities is stochastic, that is based on probability with no minimal threshold dose. Cancer development after radiation exposure is also stochastic.