Late effects (218–222)

Radioactive Rays Facilitating the Aging of Eye Lens Observed with Slit-lamp, Optical Microscope and Ereticron Microscope

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Many reports described the aging of human eye lens caused by age; however, few touched on the relationship between the morphological change and the aging of eye lens caused by radioactive rays. Two groups were included in our study, with a 4 Mev X rays accelerator, 200 cGy / once, 5 times / week.

Based on the above results, we considered that radioactive rays facilitated the aging of eye lens.

Histological changes described here suggest that long intermittent irradiation may cause the aging of eye lens.

Histopathological findings of childhood thyroid cancer in Gomel, Belarus

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We reviewed histopathologically 29 cases of childhood thyroid cancer occurring between 1991 and 1995 among 25,000 screening subjects in Gomel, Republic of Belarus, the region most severely radio-contaminated by the Chernobyl nuclear power plant accident in 1986. The patients were 20 girls and 9 boys with a mean age of 11.2 years. The mean age at the accident was 3.3 years. Mean tumor diameter was 1.35 cm, and all cases were papillary carcinoma with various amounts of solid component or follicular structure. Psammoma bodies and stromal fibrosis were encountered to some extent in almost all cases. The tumors were highly prone to local invasion and regional lymph node metastasis. There are some differences in tumor structures of papillary carcinoma between Japanese and Gomel cases, suggesting that carcinogenesis of thyroid cancer is different between them.