

Fertility after radioactive iodine therapy in thyroid cancer patients

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Abstract

Background: For patients with differentiated thyroid carcinoma (DTC), the effect of radioactive iodine (RAI) therapy on gonadal and reproductive function is an important consideration.

Objective and Methods: 127 children were operated on thyroid in case of DTC during 1975-2015. 87 pts were treated by RAI (1-13 times). Average age is 15 years (4-18). Histological types of DTC were papillary (69%), follicular (27%) and other (4%). Average follow up period is 3 year (2-40). We analyzed effect of therapeutic RAI on sex steroid level; on ovarian function, menses, ovulation in women; sperm in men; future fertility; pregnancy outcomes.

Results: Early side effects (during 1st week after RAI) included nausea and vomiting (29%), sialoadenitis (22%), temporal bone marrow dysfunction (6%). Late side effects included permanent salivary glands' dysfunction (2%), permanent bone marrow dysfunction (4%), lung fibrosis (5%), second tumors – leucosis, breast cancer (4%), and fertility disorder (7%). Fertility was analyzed in 78 pts. Sterility (2%), amenorrhea (4%), changes in menstrual period (5%), miscarriage (4%).

Conclusion: RAI should be prescribed only for indications. Sexual cell should be cryopreserve before RAI.



Biography:

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Speaker Publications:

1. "P298 Thyroid cancer patient's fertility after radioactive iodine therapy"; Archives of Disease in Childhood. / 2019 / 104(3) / pp A277.1-A277.
2. "OC54 Intraoperative nerve integrity monitor as part of safety dissections of recurrent laryngeal nerve in child and adolescents thyroid surgery"; Archives of Disease in Childhood / 2019 / 104(Suppl 3) / A22.3-A23.
3. "Prophylactic thyroidectomy as method of medullary thyroid carcinoma prevention in children from MEN syndrom families"; Pediatrician (St. Petersburg) / 2017 / Vol 8(5), pp 5-11.
4. "Russian Thyroid Surgery Origin, Development in XIX - Beginning of XX Century and Present Time"; Endocrinology Surgery/ 2014 / Vol 8(1), pp 27-36.
5. "Bilateral synchronous parathyroids cancer and femoral neck fracture as the complications of tertiary hyperparathyroidism"; Endocrine Surgery / 2014 / Vol 7(4), pp 21-24.

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