VERBATIM

'This is not the Holy Grail study, but we may have visited the scene of the crime.'

Dr. Sharon Perry, p. 79

Radioiodine Therapy Low Risk for Eye Disease

BY MIRIAM E. TUCKER
Senior Writer

WASHINGTON — Graves' ophthalmopathy is uncommon in the first year after ablative radioiodine therapy, Julie E. Hallanger-Johnson, M.D., and her associates reported in a poster at the annual meeting of the American Association of Clinical Endocrinologists.

Graves' ophthalmopathy (GO) affects up to 30% of patients with Graves' disease, with severe effects in 3%-5%.

The influence of radioiodine on the development of GO is not clear and is considered a controversial area. Randomized data of good quality are not available, and no reliable clinical or laboratory predictors of the development of GO following radioiodine therapy have been identified, although tobacco use has been suggested as a possible risk factor, said Dr. Hallanger-Johnson of the Mayo Clinic, Rochester, Minn., and her associates.

At the clinic, radioiodine therapy is the first choice of treatment for hyperthyroid adult Graves' patients, regardless of the presence or severity of ophthalmopathy.

For the study, the investigators reviewed the charts of 592 such patients who had received their first radioiodine therapy between 1990 and 1993. Most of the patients were women (76.9%), and the group had a mean age of 49 years. The majority (63.2%) had a history of smoking, 45.7% were current smokers, and 19.9% had taken antithyroid medication before being referred to Mayo.

GO was present prior to radioiodine therapy in 18% (105) of the patients, comprising 21% of the smokers and 14% of the nonsmokers. Those with GO at baseline had significantly higher levels of thyroid-stimulating immunoglobulin (TSI). They also were more likely to have been taking antithyroid medication (36% vs. 16%), suggesting that referring physicians were under the impression that radioiodine therapy might have adverse effects on GO, the investigators noted.

The purported adverse effects of radioiodine therapy and the increase in TSH receptor antibodies typically occur in the first few months.

The rate of new-onset GO was 5% in the first year after radioiodine therapy, rising to 20% at 10 years. Patient survival free of GO was 95% at 1 year, 86% at 3 years, 86% at 5 years, and 81% at 10 years.

Development of new GO was not related to gender, smoking status, serum thyroxine values, thyroid weight, age, or need for a second dose of radioactive iodine, but was marginally related to higher levels of TSI.

The purported adverse effects of radioiodine therapy and the increase in TSH receptor antibodies typically occur in the first few months after radioiodine therapy. The fact that new cases of GO occurred in just 5% in the first year, with the rate remaining steady for the first 3 years, makes it unlikely that radioiodine therapy has an adverse effect on patients who do not already have GO at baseline, Dr. Hallanger-Johnson and her associates noted. ■