

outcome of toxic diffuse goiter. We have shown a clear difference in outcome when patients are treated simultaneously with anti-thyroid drugs. The superiority of our method to the various so-called low-dose methods has not been established.

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Mechanism of Pertechnetate and Iodine-123 Localization in Warthin's Tumor

We read the letter by Moinuddin and Rockett (1) with interest. They describe a patient whose Warthin's tumor in the parotid gland was visualized on 24-hr iodine-123 scan. We have encountered a similar patient (Fig. 1). A follow-up pertechnetate (Tc-99m) salivary gland scan was virtually diagnostic: there was increased radioactivity in the parotid tumor and the activity failed to wash out following administration of potassium perchlorate (2-4). Surgical confirmation was obtained.

A possible explanation of the reaction of Warthin's tumor to pertechnetate and iodine could lie in its histology. These tumors (and oncocytomas) arise from the ductal epithelium and retain

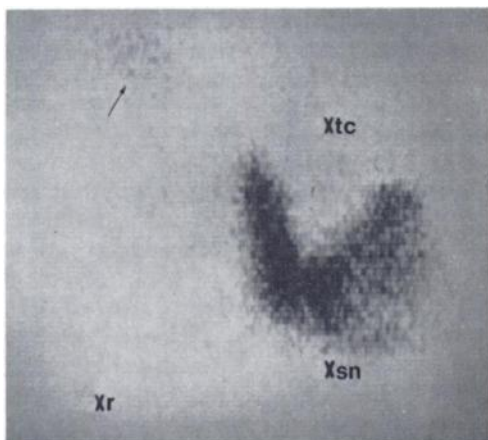


FIG. 1. Twenty-four hour iodine-123 scan showing cold nodule in left lobe of thyroid and accumulation of radioiodine in right parotid mass. Thyroid cartilage (tc); suprasternal notch (sn); right side of the neck (r).

their ability to extract and secrete large anions (iodides, pertechnetate, etc.) (5,6). The presence of large numbers of mitochondria in the tumor cells also confirms their secretory capabilities (7). There is no communication between the cystic spaces within Warthin's tumors and the ductal system; therefore, pertechnetate and iodine continue to accumulate without being discharged.

The failure of perchlorate to wash the pertechnetate out of the Warthin's tumor in our patient is against the theory that the uptake of iodine in such tumors is related to aberrant thyroid tissue.

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Re: Development of I-123-Labeled Amines for Brain Studies: Localization of I-123 Iodophenylalkyl Amines in Rat Brain

I read with great interest the paper on "Development of I-123-labeled amines for brain studies: Localization of I-123 iodophenylalkylamines in rat brain" by Drs. Winchell et al. (1). I bring to the attention of the authors and readers that the compound identified as 4-iodoantipyrine in the text is actually 4'-iodoantipyrine (as shown in Table 1A). These two compounds have different chemical formulae and chemical characteristics. The interchange of names might create some confusion because only 4-iodoantipyrine has been accepted as a true tracer for the blood flow measurements in the brain.

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