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THE UNUSUAL CASE OF THE APPEARANCE OF RADIOIODINE (^{131}I) UPTAKE IN LUNG METASTASES IN A 67 YEAR - OLD PATIENT WITH PAPILLARY THYROID CANCER (PTC).

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CASE PRESENTATION

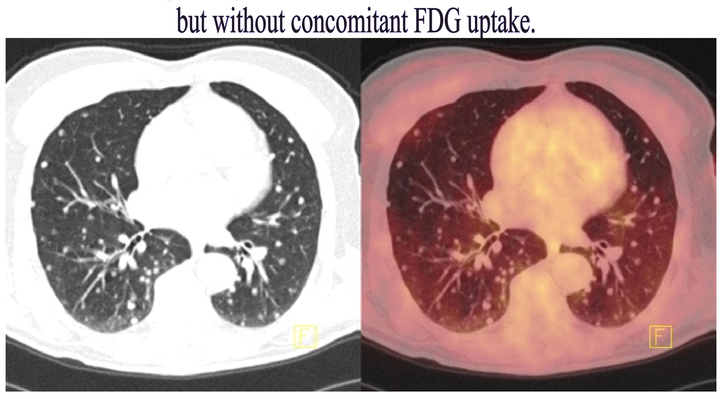
FEB. 2004 → total thyroidectomy » H-P: PTC with infiltration of the soft tissue of the neck (pT_3N_0).

MAR. 2004 → ablative dose of ^{131}I (2700 MBq) and radiotherapy (RT).
Remission not achieved: ^ TG (36 ng/ml), a-TG - negative, persistent ^{131}I uptake in the thyroid bed on WBS

2004 - MAR. 2007 → several treatments with ^{131}I (total dose of 21275 MBq)

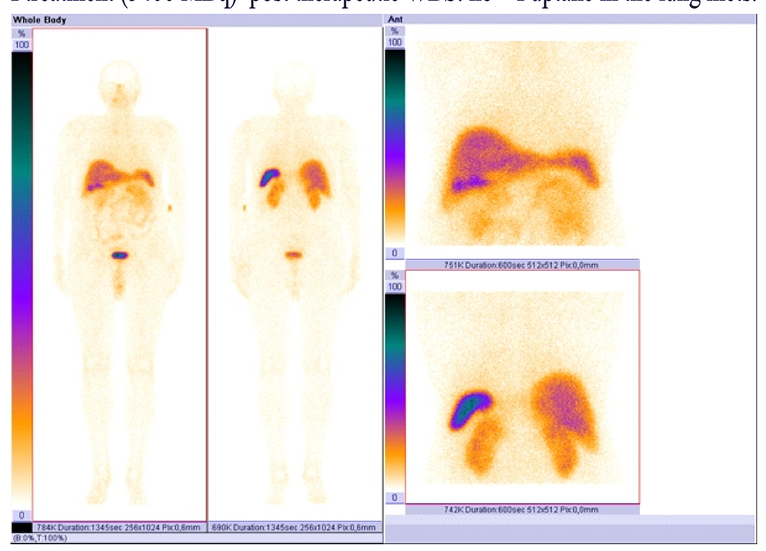
MAR. 2007 → lack of ^{131}I uptake in the last post-therapeutic (WBS) , TG (51ng/ml)
STOPPED TREATMENT WITH ^{131}I; chest CT and bone scan- negative for mets.

DEC. 2007 → PET -CT with FDG: multiple lung micro-mets (less than 10 mm in diameter) in the CT scan, but without concomitant FDG uptake.



JAN.2008: the sample of lung tissue: HP: PTC lung mets confirmed

FEB. 2008 → ^{131}I treatment (5400 MBq) post therapeutic WBS: no ^{131}I uptake in the lung mets.

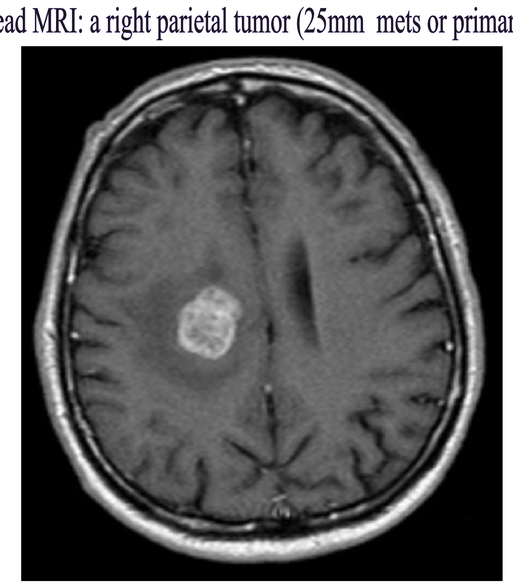


2008 → patient refused treatment with the kinase inhibitor.

2008 - 2012 → the patient's condition remained stable - without shortness of breath, and complaints,
TG on the suppressive therapy has gradually increased to 172 ng/ml,
lung imaging studies were not performed.

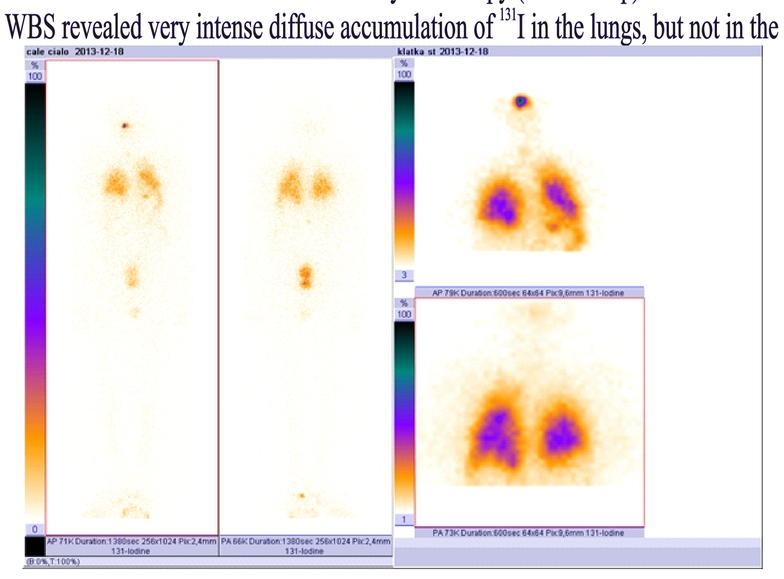
2012 → agreement to treatment with kinase inhibitor
disqualification because of gastrointestinal bleeding.

EPISODE OF APHASIA
head MRI: a right parietal tumor (25mm mets or primary).



OCT. 2013

TREATMENT:
RT to the head followed by ^{131}I therapy (5400 MBq).
Surprisingly WBS revealed very intense diffuse accumulation of ^{131}I in the lungs, but not in the parietal lobe.



CONCLUSIONS

The case described above raises the question of whether the appearance of radioiodine uptake in lung metastases in 2013 stems from some unknown mechanism or rather the lack of radioiodine uptake in lung metastases in 2007 was caused by contamination with iodine? This is possible but unlikely, since the patient had been treated many times before with ^{131}I and has always been informed about the principles of avoiding cross-contamination.
However, ioduria was not performed in the patient as this examination is not routinely performed in our country.