Twelfth Clinicopathological Conference on Pituitary Disease

Programme And Abstract Book

Wednesday 10\textsuperscript{th} February 2010, Royal College of Physicians, London
11:40  Pituitary Foundation
       Kit Ashley, Director

11:50  Forum 2: Aggressive pituitary cases
       Chairs: Dr MV Vanderpump and Miss J Grieve

Case 7: Acromegaly with multiple aggressive recurrences: Effect of temozolamide treatment
       C Steele, I.A. MacFarlane, Mr M. Javadpour and Dr CDaousi – Liverpool

Case 8: A Case of aggressive macroprolactinoma resistant to dopamine agonist therapy and masquerading as an astrocytoma
       TM Barber JAH Wass

Case 9: Temozolomide-induced regression of hepatic metastases in a Pituitary corticotroph carcinoma with low O\textsuperscript{6}-methylguanine-DNA-methyltransferase (MGMT) expression
       Cambridge & Ontario

Case 10: Targeted Radionuclide therapy for metastatic pituitary Carcinoma
       NL Fersht M.N. Gaze, J. Bomanji, S.E. Baldeweg and M.Powell – London

Case 11: Pituitary Metastasis – Approaches to diagnosis and Management
       MA Saeed N Karavitaki and JAH Wass, Oxford

13:00  Lunch and Posters
Case 11: Pituitary Metastasis — Approaches to Diagnosis and Management

Author(s): MA Saeed, N Karavitaki and JAH Wass (Department of Endocrinology, Oxford Centre for Diabetes, Endocrinology and Metabolism, Churchill Hospital, Oxford

History:
A 68-year-old male, presented 16-months after a stable, post-chemotherapy, right upper lobe pulmonary adenocarcinoma, with a 2-month history of headaches, right-sided visual disturbance, low libido and tiredness. He denied increased thirst and nocturia.

Examination:
There were no signs of hypersecretory endocrine conditions, and he had left-sided blindness from previous trauma, and right-sided superior temporal quadrantanopia, with intact cranial nerves.

Investigations:
1) normal renal and liver function; 2) normal adjusted calcium; 3) normal IGF-1; 4) secondary hypogonadism: LH <0.1 IU/L (1.5-9.3), FSH 0.3 IU/L (2-20) and 9am testosterone <0.4 nmol/L (8.4-28.7); 5) secondary hypothyroidism: TSH 2.12 mU/L (0.5-6.0) and FT4 8.8 pmol/L (11.5-22.7); 6) suboptimal short synacthen test (0min: 195 nmol/L and 30min: 506 nmol/L (>580)) and, 7) normal prolactin.

An MRI brain with gadolinium showed a 2cm x 2cm x 1cm intra and suprasellar, poorly enhancing mass, with significant compression of the optic chiasm — a possible metastasis involving the pituitary and hypothalamus.

Management:
Under hydrocortisone cover, because of the large suprasellar component, he had an elective craniotomy to decompress the optic chiasm. Histopathology confirmed a metastatic adenocarcinoma from the pulmonary primary lesion.

Postoperatively, he had ACTH deficiency and was replaced with hydrocortisone, and required Desmopressin for cranial diabetes insipidus.

He received adjuvant pituitary radiotherapy, and a bone scan confirmed he had metastasis to the bones for which he received lumbosacral radiotherapy.

The patient died 6-months from diagnosis of the pituitary metastasis.

Discussion: 1, 2

Pituitary metastasis is mainly asymptomatic and can be missed due to symptoms common to advanced malignancy. The commonest presentation is diabetes insipidus. The primary sites are usually the breast and the lung (70%). Adequate replacement therapy, metastatic tumour resection, adjuvant radiotherapy and/or chemotherapy are advised for improved quality of life. The median survival time is 6 months.

References:

https://MujahidSaeed.com