

Breaking the trend - Immunotherapy in a refractory case of mRCC

Dr Shien Chow
The Christie NHS Foundation Trust
United Kingdom



Case Presentation

Mrs LW

- 52 yo lady presented with seizure March 2013
- Diagnosis : solitary brain lesion, right kidney tumour, lung, skin and paraspinal metastasis
- Treatment: Brain tumour resection and WBRT, right nephrectomy, XRT to paraspinal mass
- Histology: Clear cell carcinoma, no sarcomatoid or papillary element
- 90% solid/alveolar 90 % clear cell CAIX 90%
- No comorbidity PS0

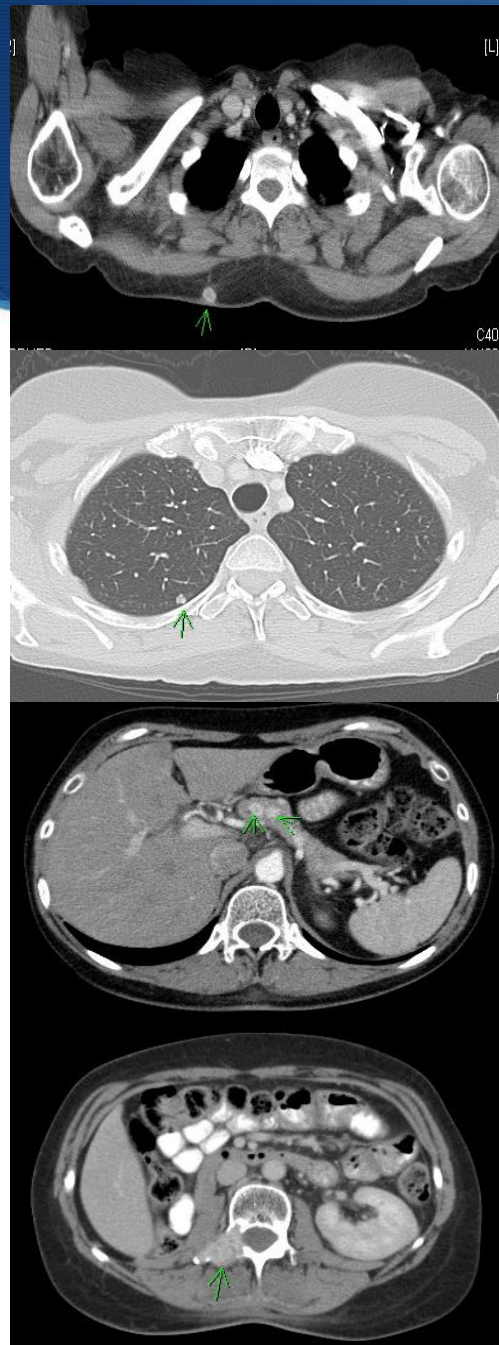
Case Presentation

- Commenced on Pazopanib – Progressive Disease
- Switched to Axitinib – Progressive Disease
- Switched to Everolimus Sep 2013 to Jan 2014 - Progressive Disease But..
- CNS – remained disease-free
- PS1 and well enough to continue university degree
- Patient very keen to try anything

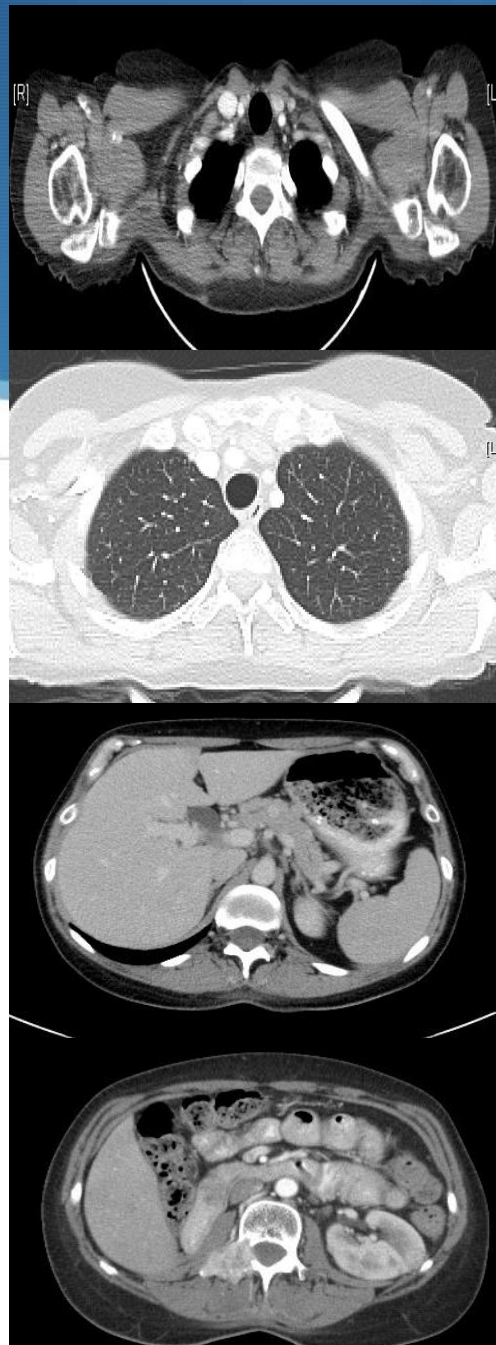
Case Presentation

- Histology seemed ideal for High Dose Interleukin 2 (HD IL2) – started treatment Jan 14
- Tolerated treatment well except erythematous skin – self limiting
- Visible shrinkage of cutaneous nodule
- CT at 10 weeks showed mixed response – some good response but enlarged paraspinal mass and ? Small new bone metastasis

Before IL2c



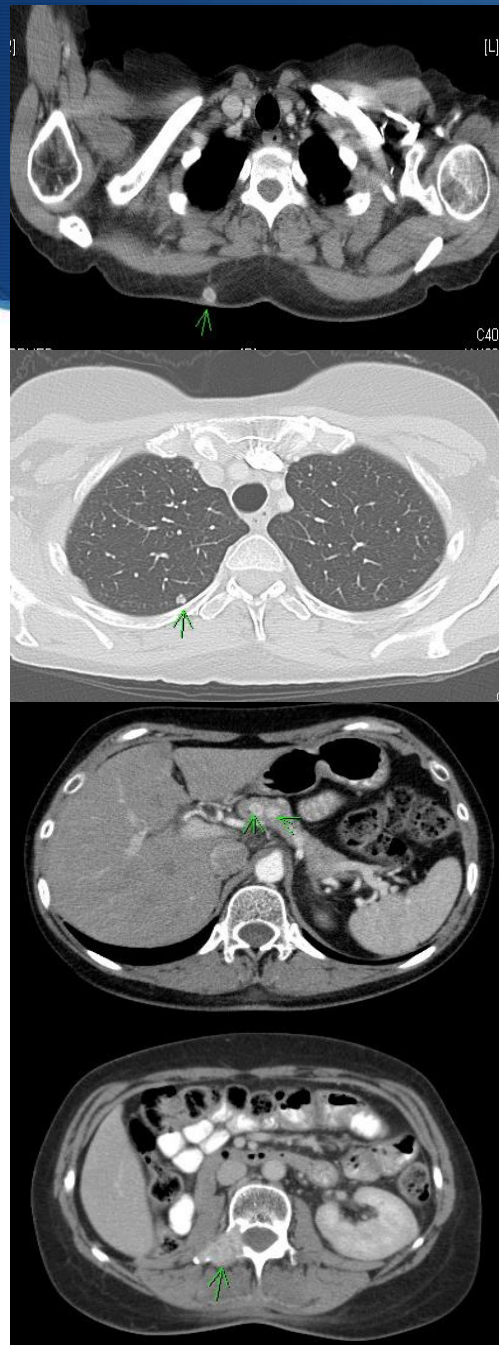
After C1



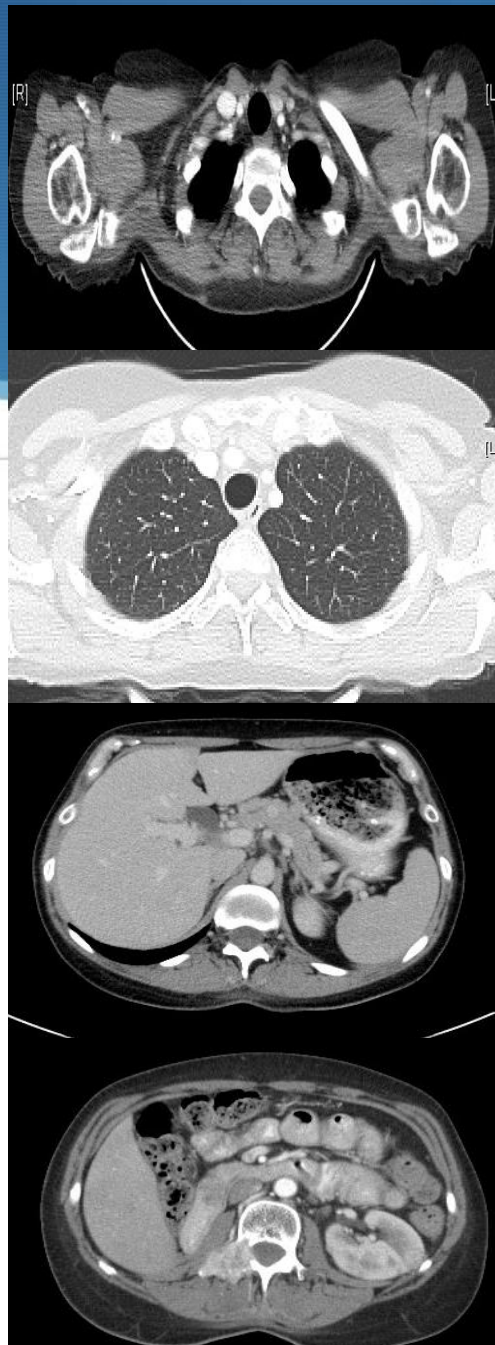
Yet another ineffective treatment?

- But clear response elsewhere
- Urology MDT ruled the case futile to further treatment, radiotherapist unwilling to retreat paraspinal lesion.
- However, patient and husband wanted to try more HD IL2 ,we decided to proceed further with cycle 2 HD IL2!

Before IL2c



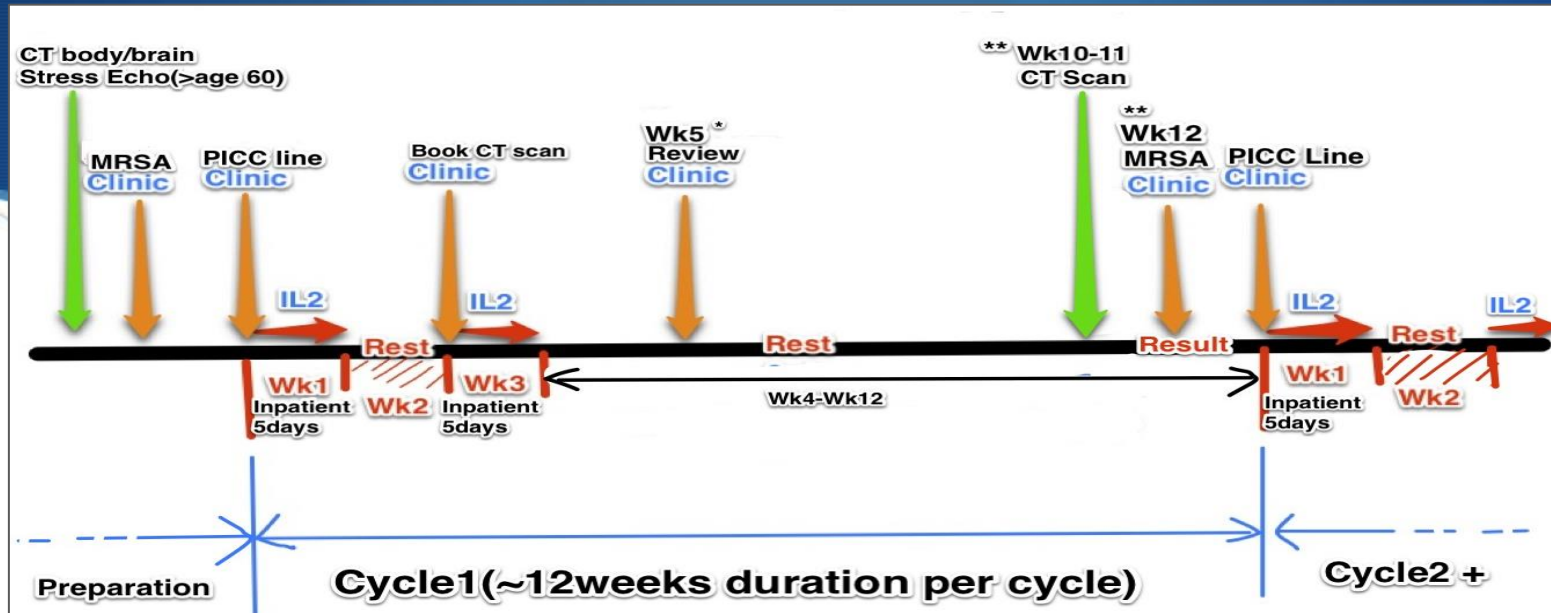
After C1



After C2



High dose Interleukin 2 (HD IL2)



- Only treatment capable of durable remission in mRCC
- 600,000-720,000 unit/kg IV Q8hrly
- Unselected population – ORR 15% CRR 7%
- Pathology-based patient selection in treatment-naïve patients - ORR 49% CRR 25% in patients with favourable pathology¹
- Similar results (42% and 19% respectively) seen in patients after targeted therapy²

1. Shablak et al. High-dose interleukin-2 can produce a high rate of response and durable remissions in appropriately selected patients with metastatic renal cancer *J Immunother* 2011 Jan;34(1):107-12
2. Chow et al. High-dose interleukin-2 (HD IL2) armed with pathology-based selection criteria: A real option in treatment of metastatic renal cell carcinoma (mRCC) after targeted therapy (ESMO 2014, Madrid) Abstract no 846P

Consideration points

- HD IL2 can be effective in mRCC with suitable histology even with multiply refractory disease to standard treatment, and can be considered for patient with favorable pathology and clinically good performance status.
- This case also illustrated the challenge in assessing efficacy of immunotherapy
- Lag in response possibly due to vasculature disruption from 1) previous radiotherapy? 2) Large initial tumour size?
- Must be patient and have faith(your MDT may not be always right!)