

# Lightning Strikes Thrice: Ultra Rare Synchronous Triple Primary Malignancies

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## INTRODUCTION

Multiple malignancies are reportedly rare. However, an increased incidence has been attributed to longer life expectancy, and advancement in cancer detection and treatment. We discuss the diagnostic and management challenges in patients with the rarest form of multiple malignancies, that of triple primaries.

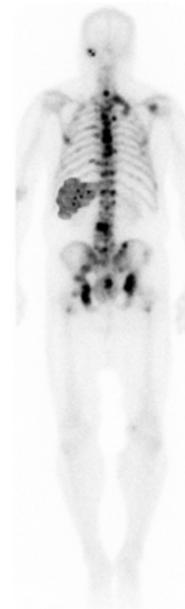
## REPORT

An 82-year-old male, ex-smoker, without a family history of malignancies, nor genetic predisposition, presented with intestinal obstruction. Subsequent colonoscopy for tissue diagnosis lead to sigmoid colectomy for a sigmoid adenocarcinoma, pT2 N0 Mx. Contrast-enhanced computed tomography staging revealed suspicious liver lesions. Positron-emission tomography then uncovered metabolically active hot-spots in the prostate and parotid glands, as well as oligo-metastasis to the spine (Figure 1). As there was no mechanical pain nor neurological deficit, the spine metastases were amenable to radiotherapy. Transurethral biopsy confirmed a primary prostate adenocarcinoma, Gleason 4+4. Whilst awaiting radiotherapy, a painful lump developed over the right cheek. Following visualisation of a solid right parotid mass via computed tomography, a superficial parotidectomy exhibited mucoepidermoid carcinoma with positive margins, pT2 N0. Total parotidectomy, genetic counselling, and stereotactic radiotherapy to the spine have been planned, following multidisciplinary consensus.

## DISCUSSION

Epidemiological studies have shown an increase in incidence of multiple malignancies over the past decade. This has been attributed to longer life expectancy, and advancement in cancer detection and treatment<sup>1,2</sup>. Factors that increase susceptibility of multiple malignancies are unique to the individual which includes

underlying genetic predisposition, environmental and lifestyle factors, and effects of cancer treatment<sup>2</sup>. This imparts challenges in diagnosis and management to the unwary clinician.



*Figure 1. PET scan showing sigmoid oligo-metastasis to the spine and liver, with incidental findings of synchronous prostate and right parotid primaries*

## CONCLUSION

A multidisciplinary approach is essential in providing the best possible outcome for patients, as multiple malignancies pose major challenges to the clinician. Spine metastases do not always necessitate surgery. Vigilant long-term multimodal surveillance is essential. Additionally, a high index of suspicion is vital in clinching the diagnosis in multiple malignancies.

## REFERENCES:

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2. Buiatti E, et al. *Eur J Cancer* 1997; 33: 1829–34.
3. Vogt A, et al. *ESMO Open* 2017; 2(2): e000172.