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Does IgG4-related disease impact on metastasis?- a case of disseminated cutaneous metastasis of laryngeal squamous cell carcinoma.

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Introduction & Objectives:

Materials & Methods:

Results:

A 55 year old gentleman presented with a 3 week history of widespread tender subcutaneous nodules associated with lethargy. Physical examination identified numerous tender, smooth mobile nodules located to the left forearm, right flank and bilateral thighs.

This gentleman's complex medical background included; multisystemic IgG4 related disease involving the liver, lung and oesophagus requiring; oseophagectomy and gastric transposition; and medical management with Azathioprine and Prednisolone. Additionally, he had a recent diagnosis of poorly-differentiated laryngeal squamous cell carcinoma treated with debulking surgery and adjuvant radiotherapy.

Deep incisional biopsy of a cutaneous lesion, demonstrated a large infiltrative tumour, extensively replacing the dermis and subcutaneous tissue. Histology suggested a poor-differentiated acantholytic carcinoma, with focal IgG4 staining.

We postulate that the subsequent rapid disseminated metastasis of his laryngeal SCC was secondary to the immunomodulatory effects of his underlying IgG4 related disease. In patients with known IgG4 related disease, there is over expression of PD-1 (programmed cell death 1) and PD-L1 (programmed cell death ligand 1)3,4, which increases the chance of malignancy. Similarly in squamous cell carcinoma5, PD-1 and PD-L1 are over expressed facilitating a possible escape mechanism which acute onset of widespread cutaneous metastasis.

Due to role of PD-1, would Cemiplimab6 have been an option for treatment in this patient with IgG4 malignancy?

Conclusion:

References:

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