

The First Published Case of Tonsil Cancer Presenting with Polymyositis

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Case Report

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Abstract

Background: Polymyositis is an autoimmune mediated inflammatory myopathy associated with lung, breast, bladder, colorectal and haematological malignancies. There is currently no published evidence of a case of tonsil cancer presenting with polymyositis.

Case Report: A 69 year old man presented with signs and symptoms of polymyositis. Thorough investigation revealed a squamous cell carcinoma of the tonsil with no evidence of any other malignancy. After treatment with excision and neck dissection, the patient's polymyositis resolved.

Conclusions: Polymyositis is a recognised paraneoplastic syndrome associated with a number of cancers. This is the first case (to the authors' knowledge) however as being the primary presenting feature of tonsil cancer.

MeSH Search: Palatine Tonsil, Tonsillar Neoplasms, Polymyositis

Background

Polymyositis is an autoimmune mediated inflammatory myopathy. The incidence of a concomitant malignancy at first presentation of polymyositis is between 3-10% [1-4]. The most common cancers associated with polymyositis are lung, breast, and bladder, colorectal and haematological malignancies [4]. A PubMed literature search (tonsil AND polymyositis) and (oropharyngeal cancer AND polymyositis) revealed four relevant articles with five reported cases of dermatomyositis (a similar autoimmune mediated condition) associated with tonsil carcinoma and no previously reported cases of polymyositis associated with tonsillar malignancy [5-8]. To the authors' knowledge, we describe the first recorded case of polymyositis associated with tonsil carcinoma.

Case Report

A 69 year old gentleman was admitted under the combined care of medical and rheumatological teams with an eight week history of shortness of breath, progressive dysphagia, lethargy and limb weakness. His background was that of COPD only. Investigations included blood work revealing a creatinine kinase of 12,208 (40-320), barium swallows revealing an oropharyngeal dysphagia and a muscle biopsy showing a necrotising myopathy. Subsequent cross sectional imaging (CT) and ultrasonography revealed multiple pulmonary emboli, a mass in the right tonsil and associated right neck lymphadenopathy. No other malignancy was identified in the thorax, abdomen or pelvis. Right sided tonsillectomy was performed which revealed a poorly differentiated squamous cell carcinoma

of the tonsil. The patient subsequently underwent laser excision of the tonsil bed and a right neck dissection which revealed 1/20 positive lymph nodes. In the immediate post operative period, creatinine kinase levels fell to 692. Six months post operatively, the patient's symptoms of lethargy, limb weakness and shortness of breath have all resolved and cross sectional imaging of his abdomen and thorax are clear of malignancy. His dysphagia persists and he remains reliant on precutaneous gastrostomy feeding tube.

Conclusion

Whilst polymyositis is a recognised paraneoplastic syndrome of certain cancer types, this case represents a rare presenting feature of a common malignancy. It is clear that the pathophysiology of polymyositis as a paraneoplastic syndrome is incompletely understood and work in this area may benefit prompt diagnosis and survival rates.

Bullet Point Summary

- Polymyositis is an autoimmune mediated inflammatory myopathy associated with lung, breast, bladder, colorectal and haematological malignancies.
- There is currently no published evidence of a case of tonsil cancer presenting with polymyositis.
- A 69 year old man presented with signs and symptoms of polymyositis.
- Thorough investigation revealed a squamous cell carcinoma of the tonsil with no evidence of any other malignancy.
- After treatment with excision and neck dissection, the patient's polymyositis resolved.
- This is the first case (to the authors' knowledge) however as being the primary presenting feature of tonsil cancer.

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