

Facial nerve palsy secondary to parotitis

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DESCRIPTION

This 66-year-old woman, who was undergoing chemotherapy (weekly paclitaxel) for metastatic breast cancer, was admitted under the oncologists with dehydration secondary to vomiting and diarrhoea. While an inpatient, it was noted that she had developed a right-sided lower motor neuron facial nerve palsy. On further clinical examination, the right side of the neck was noted to be swollen and tender (see figures 1 and 2). Blood tests showed a marked inflammatory response with a white cell count of 18.0 and C reactive protein of 307. An ultrasound showed a swollen right parotid gland, suggestive of parotitis which likely caused the facial nerve palsy. A CT scan was performed to ensure there was no abscess formation, as parotid abscess are an established cause of facial nerve palsy.¹ The CT scan showed an inflamed parotid but no organised collection (see figure 3).

The working diagnosis was that the patient had developed chemotherapy related gastroenteritis, which caused dehydration, which likely contributed to her developing bacterial parotitis. While drug induced parotitis has been reported with some chemotherapy agents, it is a rare adverse drug reaction and has not been reported in patients taking paclitaxel.² Due to the raised inflammatory markers and clinical presentation, the authors were confident in the diagnosis of bacterial parotitis. As the facial palsy and parotitis developed simultaneously, it was felt that the facial palsy was likely due to compression of the facial nerve within the parotid.

The patient was managed non-surgically with intravenous antibiotics and oral steroids. The importance of good eye care was stressed, with regular eye-drops and taping of the eye at night to prevent corneal abrasions. The patient was advised that while the parotitis will improve in a matter of days, it is likely that the facial nerve palsy will take much longer to resolve. The patient was also



Figure 2 Left-sided facial nerve palsy with a swollen parotid ipsilaterally (when asked to raise eyebrows).



Figure 3 Axial CT head and neck showing an inflamed left parotid gland (arrow).

advised that there was a possibility that the facial weakness may never fully resolve.

Learning points

- ▶ A full head and neck exam, including neck examination, otoscopy, examination of the oral mucosa and testing of all cranial nerves, must be undertaken in all patients who present with a new lower motor neuron facial palsy.
- ▶ Bell's palsy is idiopathic facial nerve palsy—it must be a diagnosis of exclusion when no other cause can be found.
- ▶ Management should focus on treating any underlying cause and judicious use of steroids to reduce any perineural inflammation.

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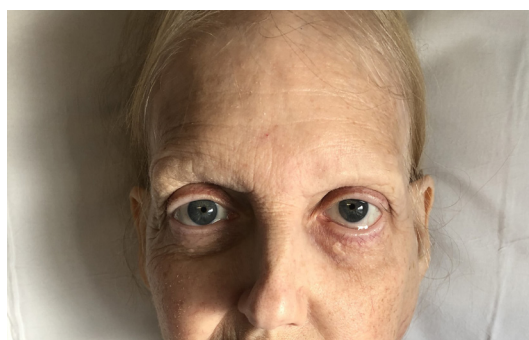


Figure 1 Left-sided facial nerve palsy with a swollen parotid ipsilaterally (with facial muscles at rest).



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