

## Oro-nasal myiasis in a lymphoma patient



A 27-year-old male previously diagnosed with extranodal NK/T-cell lymphoma, nasal type (ENKTLN), presented with recurrent unilateral epistaxis and palatal pain of 2 weeks duration. He had initially been treated with radiotherapy and chemotherapy according to the CHOMP protocol (cyclophosphamide, doxorubicin, vincristine, prednisone, methotrexate, leucovorin). Following disease progression, he had been treated with L-asparaginase and, finally, an autologous haematopoietic stem cell transplant had been performed a year before the current presentation. Ulceration and necrosis of the hard palate had been observed prior to the transplant and surgical debridement of necrotic areas had then been performed. Physical examination on admission showed the previously reported ulceration and necrosis of his hard palate and beneath this, living larvae were encountered (left). In addition there was an erythematous, swollen and warm region of the right side of the face, suggesting secondary cellulitis. On exploration of his nasal cavity, 60 larvae were encountered and manually removed. Examination of posterior spiracles from removed larvae by light microscopy was suggestive of *Cochliomyia hominivorax* (centre), the New World screw-worm fly. Computed tomography (CT) scanning of the paranasal sinuses (right) showed material of soft tissue density in the maxillary sinuses, ill-defined opacities with interposed aerated areas (larvae, white arrow) in the nasal cavity and an oro-nasal fistula (arrowhead). A diagnosis of oral and nasal myiasis with periorbital cellulitis was established. The patient was started on oral ivermectin, cefepime and metronidazole and the necrotic lesions of the palatal bone were surgically removed. The patient made a full recovery.

Typically, ENKTLN is characterized by progressive midline facial destruction. As the tumour mass enlarges, invasion and destruction of structures of the upper anterior aerodigestive tract can occur, with the tissues becoming progressively necrotic. Occasionally, local extension from the nasal cavity causes destruction of the hard palate with a characteristic midline perforation. Without adequate hygiene and wound dressing, these ulcerated, necrotic lesions of the oro-nasal region are major predisposing factors for myiasis. Myiasis of the oro-nasal region is uncommon; it should be prevented in at-risk ENKTLN patients by educating patients and parents, mainly from rural areas and low socio-economic groups, about personal hygiene, adequate care of wounds, control of the fly population and maintenance of sanitation of the surroundings. Treating physicians should be aware of this potential complication in ENKTLN patients in order to ensure adequate prevention and treatment of this unpleasant condition.

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