

**DIROFILARIA REPENS INFECTION OF THE ORAL MUCOSA AND
THE CHEEK -A CASE REPORT**

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Nematodes principally inhabiting the extra intestinal tissues of man include the filarial worm, the guinea worm, the trichina worm and larvae of several other species. In addition to these well recognized parasites a number of rare forms have also been reported in man. These are due to accidental entering of the worm into the human body during a blood meal of an arthropode vector. Filariae of genus *Dirofilaria* is such a rare parasitic infection due to occasional transmission of the *Dirofilaria* larvae to man by their mosquito vector which belong to the genera *Mansonia* and *Aedes*. *Dirofilaria repens* is the commonest type out of 40 different *Dirofilaria* species identified in man. It is also identified as the commonest parasite seen in dogs and cats in Sri Lanka. Described cases of *Dirofilaria repens* infection in Sri Lanka is very scarce, Ratnavale and Dissanayaka (1964) and Dissanayaka (1975).

Intraoral presentation with *Dirofiloria repens* from Sri Lanka has not been reported previously. This presentation is of a 80 year old female patient from Ampara, who first reported to the Ampara base hospital and was then transferred to the Oral and Maxillofacial Clinic, General Hospital, Kandy for further evaluation and treatment. She presented with a diffuse swelling involving the left face excluding the eye and also involving the mucosa of the left cheek of one months duration, increasing in size gradually with slight tenderness on and off, with no other signs of inflammation. A firm, non fluctuant, 2-3 cm, nodule was palpable at the center of the diffuse swelling with a another liner, solid structure extending from the nodule towards left commissural area. Intraorally the nodule had a flat surface which was palpable in relation to the lower left premolar and molar region. Haematological investigations showed a marked eosinophilia of 12% with white blood cell count of $10 \times 10^9/l$.

Total excision of the nodule was done under general anaesthesia. Routine hematoxylin and eosin stains were prepared. The lesion consisted of two parts, a nodular part and a tubular structure. The nodular structure showed a coiled worm cut into one oblique and several transverse sections together with a dense granulomatous and eosinophilic inflammatory response with the pathognomonic *Dirofiloria repens* found in the center of the dens inflammatory response, which become sparse away from the worm. The sparse inflammatory cell infiltration included numerous eosinophils and some plasma cells together with many foreign body giant cells scattered in the fibrous tissue stroma. The structured architecture of the worm was well preserved but the dense inflammatory cell infiltration indicated the death and degeneration of the worm within the cheek mucosa. The parasite had a thick layered cuticle bearing longitudinal ridges on the outer surface. The somatic musculature was well developed. The individual muscle cells also demonstrated a basal contractile portion. Internally the central intestine and two uterine tubes were clearly seen. The uterine tubes were filled with eggs which were elongated, short and fat rod shaped. This indicated that the worm was a mature female. The tubular structure was poorly stained and the inflammatory cell infiltration was not so marked and showed more fibrous tissues. The characteristic somatic musculature and longitudinal ridges confirmed that the parasite was *Dirofilaria repens*. In conclusion, clinicians and Dental professionals must be watchful for rare diseases manifesting as common intraoral swellings.