

Acute Erosive Gastritis Due to Pine Processionary Caterpillar Setae Ingestion in a Dog (Bir Köpekte Çam Kese Böceği Setalarının Yenilmesine Bağlı Akut Eroziv Gastritis)

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Dear Editor,

Direct contact with the Pine Processionary Caterpillar (PPC) *Thaumetopoea* species induces severe local allergic and toxic reactions both in man, dogs even in cats in Mediterranean countries, with the necessitate of medical intervention. Caterpillars are the larvae of these insects look like hairy and colored orange-brown with blue bands, have covering of irritant hairs which called as setae; along its whole body except ventral surface ^[1]. These chitinous spines are rich in thaumetopoein, which makes them an urticating protein ^[2]. Furthermore, setae of the caterpillar could also keep their potential toxicity in the left nests after chitin changing period ^[3]. The aim of the present case report is to define first clinical manifestation of an acute erosive gastritis due to PPC setae ingestion in a four months old, male Pembroke Welsh Corgi.

The dog was presented to our Veterinary Teaching Hospital with complaints of acute persistent vomiting in April 2018. The owner informed that the dog had been playing with a pine cone covered with cotton wool just before the persistent vomiting had started. Any abnormalities except persistent vomiting were seen in the physical examination in the dog and initial direct and indirect radiographs were taken for elucidating of a suspicious foreign body. Both radiographs were reflects any problem among the gastrointestinal and other systems. Laboratory findings both whole blood count and serum biochemical profile were also revealed as normal. Later upper gastrointestinal system endoscopy was performed to the dog for a definitive diagnosis. Multiple esophageal and gastric petechial hemorrhages with erosions were started to be seen from

the oropharynx to the pylorus sphincter (*Fig. 1A-H*). Any foreign body or PPC was seen in both esophagoscopy and gastroscopy. After wakening the effects of sedation procedure the dog starts to vomit again and this time the vomit content was collected and pine pollens were detected during the microscopic examination (*Fig. 1I*). Finally we confirmed that the "cotton wool" on the pine cone was a nest of the PPC, and acute erosive gastritis due to PPC setae ingestion was diagnosed in the dog based on the endoscopic and microscopic examination of the vomit content with clinical examination. Treatment was started with intravenous antiemetic and fluid supplementation with oral use of gastrointestinal mucosa protectants for several days with restriction of both food and water consumption till the vomiting ended. The dog was being well after the second day of treatment and started to eat.

There have been numerous PPC direct contact reports in animals and man whole around the world. Moreover, those describe the most common findings and treatments in dogs ^[4,5]. Furthermore, similar reports in dogs were also presented in Turkey ^[6-8]. The most common clinical findings in such cases are lingual, sublingual and submandibular oedema, lingual necrosis, ptyalism, facial pruritus and vomiting. On the other hand, partial loss of the tongue, following a necrotizing glossitis is the most frequent sequel in dogs with the direct contact of PPC. Contrarily of those reported direct contact animal cases, our event differs with describing an indirect contact of this PPC. Additionally, to the authors' knowledge ingestion of this PPC setae in animals have not been reported before.



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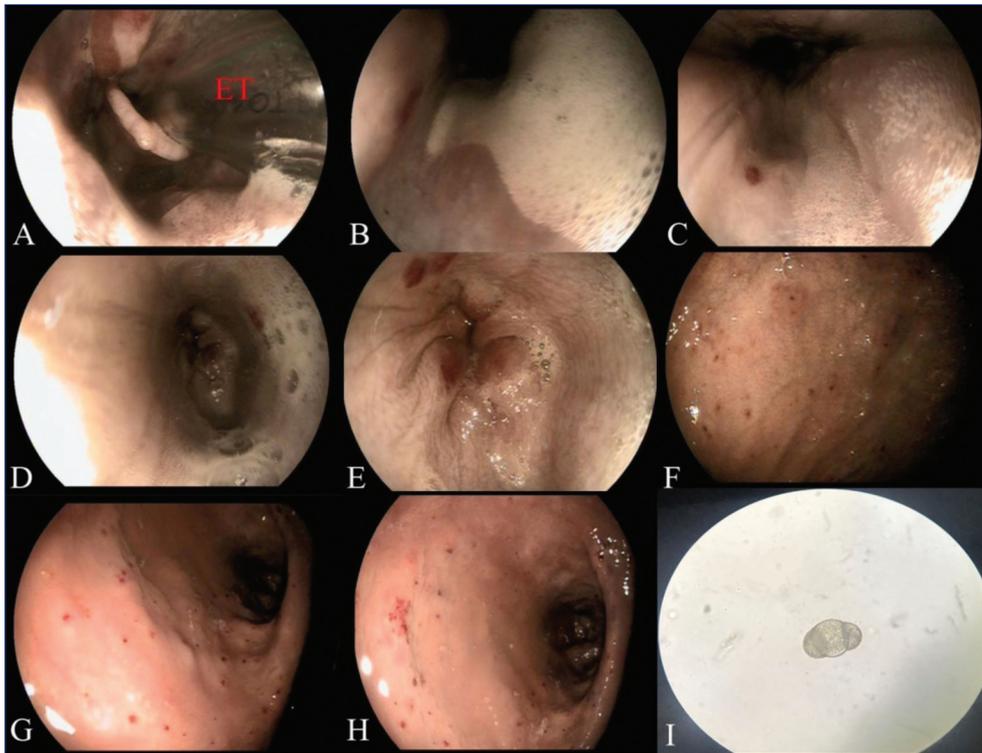


Fig 1. Views of the petechial hemorrhages with erosions in the oropharynx (A), esophagus (B, C, D), cardiac sphincter (E), corpus of the stomach (F), pylorus sphincter (G, H). View of the pine pollen during the microscopic examination of the vomit content (I); ET: Endotracheal Tube

In conclusion, this case presentation, defining the first clinical manifestation of an acute erosive gastritis due to PPC setae ingestion in a Pembroke Welsh Corgi, could be a useful report for diagnosing unspecified persistent vomiting cases in dogs especially in spring time in the Mediterranean countries.

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