Primary secretory otitis media (PSOM) has become more frequently diagnosed in cavalier King Charles spaniels. It consists of a highly viscous mucus plug which fills the dog's middle ear and may cause the tympanic membrane to bulge. PSOM has been reported almost exclusively in cavaliers.

Because the pain and other sensations in the head and neck areas, resulting from PSOM, are similar to some symptoms caused by syringomyelia (SM), some examining veterinarians may have mis-diagnosed SM in cavaliers which actually have PSOM and not SM.

The cause of PSOM is unknown. It is suspected to be due to a dysfunction of the middle ear or the Eustachian (auditory) tube: either (a) the increased production of mucus in the middle ear, or (b) decreased drainage of the middle ear through the auditory tube, or (c) both.

The principal symptoms are moderate to severe pain in the head or neck, holding the neck in a guarded position, and tilting the head. Other signs may include scratching at the ears, itchy ears, head tilt, excessive yawning, crying out in pain, ataxia, drooping ear or lip, inability to blink an eye, rapid eyeball movement, facial paralysis or nerve palsy, Vestibular disease, some loss of hearing, seizures, and fatigue. These symptoms, in many cases, are very similar to those of syringomyelia and, to some extent, to those of progressive hereditary deafness. Therefore, the examining veterinarian should take care to consider these other possible causes of the dog's symptomatic behaviors.

PSOM may be detected by veterinary neurology or dermatology specialists from either magnetic resonance imaging (MRI) or a computed tomography (CT) scan. Both require that the dog be under general anesthesia. It also may be observed using an operating microscope with good lighting and at a suitable magnification.

Treatment traditionally has consisted of performing a myringotomy, making a small cut in the eardrum (tympanic membrane), followed by flushing the middle ear to force out the mucus plug. Topical and/or systemic corticosteroids and antibiotics then are administered. The procedure may have to be repeated, in some cases several times, depending upon how the dog responds. An alternative procedure is a ventral bulla osteotomy, which involves making an incision on the under side of the neck behind the jaw bone. The auditory bulla, a hollow bony sheath that encloses parts of the middle ear, then is exposed and is opened.

Some specialist veterinarians have been prescribing N-Acetyl-L-Cysteine (NAC), a mucolytic -- mucus thinning agent or expectorant -- for cavaliers with PSOM, following surgeries.

(This article has been excerpted from “Primary Secretory Otitis Media (PSOM) in the Cavalier King Charles Spaniel” on CavalierHealth.org.)