Evaluation of a Novel Post-Operative Treatment for Sinonasal Disease in the Horse (1996–2007)

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Post-operative sinus visualization may allow further debridement and removal of lesions missed at initial surgery. Surgical time and hemorrhage are reduced by packing the sinuses and reopening with the horse standing in a controlled environment. Authors’ address: Marion duPont Scott Equine Medical Center, Virginia-Maryland Regional College of Veterinary Medicine, Leesburg, Virginia 20176; samhart@vt.edu. © 2009 AAEP.

1. Introduction
Although results of horses treated for sinonasal disease have been previously reported, the authors were interested in evaluating the outcome of horses after a specific treatment protocol.

2. Materials and Methods
Medical records of horses treated surgically for sinonasal disease between 1996 and 2007 were reviewed. Post-operatively, sinus flaps were reopened with horses standing and sedated. The number of horses requiring further treatment, median number of days post-operatively that the flaps were opened, number of times the flaps were opened, duration of hospitalization, short- and long-term survival, and complication rates were determined.

3. Results
One hundred thirty-six horses underwent surgical treatment of sinonasal disease. Ninety-two horses were included in this study. Sinuses were packed at the end of surgery. Packing was removed with the horse sedated and standing 1–6 days post-operatively. Thirty-nine horses (42%) required further treatment at that time. Eighty-nine horses (97%) survived to discharge. Incision infection was the most common complication encountered (29%). No horse required a blood transfusion. Recurrence rates were 5%, 12%, and 40% for sinus cysts, progressive ethmoid hematoma (PEH), and neoplasia, respectively.

4. Discussion
The authors recommend rapid removal of the primary lesion and packing of the sinuses during the initial surgery. Subsequently, the sinuses are re-evaluated in a more controlled environment with improved visibility, resulting in a safer and potentially more complete method of addressing sinus lesions.