Streptococcus equi serology in Swedish horses without clinical signs

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Conclusions
The seroprevalence in a group of 64 active Swedish horses was 7.8% for S. equi, which may be compared to other reported rates; 13% (UK, n=39; [3]) and 42% (Ireland, n=319; [4]).

Aim
Serology may be helpful in health screening and eradication programs for strangles in horses. The objective was to investigate seroprevalence for S. equi in active Swedish horses.

Material and methods
64 clinically healthy riding horses and ponies of different breeds were included. All horses from eight stables with frequent contacts with other horse herds were sampled. The horses were clinically examined and sampling included blood and nasopharyngeal lavage (NPL), and if seropositive for S. equi, guttural pouch lavage (GPL) was added.

Serum antibodies against antigens A and C from S. equi was examined by iELISA, from Dr Andrew Waller, Animal Health Trust, Newmarket [1]. NPL and GPL samples were investigated for S. equi and S. zooepidemicus by real-time PCR (RT-PCR) [2].

Results
- Five of the 64 (7.8%) horses had antibodies (OD >0.45) against S. equi
- The seropositive horses came from 3/8 stables
- All horses (n=64) were clinically healthy
- All horses were negative for S. equi by RT-PCR from NPL
- 36% of the horses were positive for S. zooepidemicus
- Three of the seropositive horses were endoscoped, with normal appearing guttural pouches that were negative for S. equi by RT-PCR
- Two seropositive horses were not available for endoscopy because they had moved
- Respiratory clinical signs had been observed in 10 out of the 64 horses earlier within a year, including one horse with a submandibular abscess negative for S. equi, according to a questionnaire. None of these horses were seropositive to S. equi in this study and all were negative for S. equi in NPL by RT-PCR

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References
4. Lynch et al, EID IX 2012