

Stratum Exterium Separation by Esco Buff, PhD, APF-I, CF

Stratum Exterium Separation is a separation of the hoof wall in the outer most layer of the hoof wall. The causes of Stratum Exterium Separation that have been implicated are mechanical, environmental, nutritional, and/or autoimmune issues. Usually, this condition does not create any lameness issues although it can make attaching horseshoes to the hoof wall more challenging and complicated.

The condition is seen more in wet/dry conditions, extremely wet conditions, and extremely dry conditions. Many will have hoof distortions and longer toes implicating a mechanical break down.

The separation in the Stratum Exterium of the hoof wall is a delaminating process. Very rarely does opportunistic bacteria/fungi invade it and cause any abscessing, infections or lameness issues. During the delaminating process, substrate appears to work its way up erupting out someplace in the hoof outer wall. The way it erupts out is very notable as it forms sometimes a straight line but more often a C or V shape when it erupts.









Treatment

Correctly trimming the hoof, removing flares and distortions, and removing longer toes will help eliminate or lessen this condition. Environment cannot always be controlled however, if the animal can be pulled out of wet/dry conditions it will help in strengthening the hoof wall.

Because the eruptions are in the stratum exterium, little must be done other than making sure the eruption site is smooth so the hoof wall can't catch on anything.

Stratum Exterium Separation is not the same as the genetic Hoof Wall Separation Disease (HWSD) in Connemara's. The hoof problem previously known as Hoof Wall Separation Syndrome (HWSS) has been renamed as Hoof Wall Separation Disease (HWSD). Hoof Wall Separation Disease is a verifiable and testable disease. It is a genetic autosomal recessive condition. Two carrier parents being bred with each other results in 1:4 chance of the foal being HWSD afflicted. There is now a commercially available genetic test for the HWSD mutation.

