Behavioral Changes

Changes in a horse’s behavior can also be explained by brain injury location. For instance, says MacKay, a horse with dementia is likely to have a forebrain lesion. Examples of neurologic deficits possibly attributable to brain injury include:

- Altered Menace Response and Pupillary Light Reflexes (PLRs)
- Compulsive Circling
- Altered inherent behavior (e.g., a foal no longer bonding to his dam);
- Loss of learned behaviors (e.g., no longer knowing how to be led);
- Compulsive yawning, which can occur with encephalopathy, especially that seen with liver disease;
- Bizarre postures;
- Complete large coordinated circles (without staggering), though it results from compulsive mutilation, as seen in many rabies cases; and
- Teeth grinding, a nonspecific sign consistent with encephalitis;
- Head teeth grinding, a nonspecific sign consistent with encephalitis;
- Head pressing, often manifested as pushing forward into a stall corner with the head below the withers, one cause being hyperammonemia from coronavirus enteritis, which can cause

Consciousness

Damage to parts of the brain can lead to alterations in consciousness. MacKay said that the brain’s forebrain, cerebellum, brainstem, and thalamus are all crucial to maintaining awareness. Both the forebrain and cerebellum are involved in the regulation of the hypothalamus, thalamus, and reticular formation of the brain and runs the cardiovascular system, breathing, and swallowing. A part of the brainstem is the reticular formation, called the ascending reticular activating system (ARAS), which is responsible for sustaining operation of consciousness, which is based in the

Dec. 5

Robert MacKay, BVSC, PhD, Dipl. ACVIM, professor of Large Animal Clinical Sciences at the University of Florida College of Veterinary Science, described the possible meaning of some confusing behavior (dementia);

Clues for Recognizing Confusing Neurologic Syndromes

One horse walks circles compulsively and appears as if he hasn’t had his morning coffee. Another

Head tilt and small and incomplete circles;

Home Message

Signs of accompanying cranial nerve dysfunction, such as facial paralysis or atrophy (wasting) of

Bizarre postures;

Compulsive yawning, which can occur with encephalopathy, especially that seen with liver disease;

Loss of learned behaviors (e.g., no longer knowing how to be led);

 Teeth grinding, a nonspecific sign consistent with encephalitis;