*Phenothiazines (such as acepromazine)* calm horses, but do not provide analgesia (pain relief). However, they can enhance the analgesic effects of some other medications. They can be given orally, intramuscularly, or intravenously. They also reduce blood pressure, which may be a concern for their usage in excitable or dehydrated horses, or those with low blood volume from extensive bleeding.

Acepromazine in particular yields sedation without significant ataxia (incoordination), but a known issue is rare persistent penile prolapse/paralysis.

*Alpha-2 agonists (including xylazine, detomidine, and romifidine)* provide sedation, muscle relaxation, ataxia, and analgesia when given sublingually (under the tongue), intravenously, or intramuscularly. Sedation is more powerful than that provided by phenothiazines. Xylazine is one of the cheapest and most commonly used drugs in this class, however, unprovoked aggression can occur in horses dosed with it (and detomidine).

Detomidine is 100 times more powerful than xylazine and lasts at least twice as long, but it is more expensive. Detomidine placed under the tongue can give you good sedation after 30-45 minutes. Romifidine’s effects are similar to those of detomidine, although the horse’s head tends to droop less and the analgesic effect wears off before the sedation.

Side effects of alpha-2 agonists can include decreased heart rate and cardiac output, heartbeat irregularities, hypertension (increased blood pressure), decreased respiratory rate, and reduced salivation/swallowing/gastrointestinal motility. Continuous rate infusions (IV drip) of alpha-2 agonists are becoming more commonly used. Lastly, these medications can act synergistically with each other and with opioids (more on these in a moment); they can increase the potency of opioids by 10 to 100-fold.

*Opioids (such as butorphanol, morphine, and fentanyl)* primarily provide analgesia, but they also enhance the effects of sedatives/tranquilizers. They will not keep the horse from feeling pain at surgical sites, however, so local anesthesia is still required for potentially painful procedures. One issue when giving them to horses is that they can cause nervousness and excitability when given to non-painful animals; another is the possibility of reduced gastrointestinal motility (risk of colic) with repeated administration.

Butorphanol causes a lesser degree of excitability than morphine or fentanyl, but it can cause significant ataxia at higher doses. Thus, it is often combined with xylazine to attenuate the ataxia while maintaining analgesia. Horses will tend to lean forward on this combination, so head elevation and possibly a twitch is advised. Naloxone can be used to antagonize morphine if needed to reduce excitability, but naloxone clears the system more quickly than morphine. Thus, a "booster" sedative of acepromazine might be needed after 4-6 hours if the horse is becoming excited.

*Phenothiazine (acepromazine) + alpha-2 agonist combination* is "widely practiced and appropriate" to gain long-term sedation with fewer cardiopulmonary and ataxic side effects than with alpha-2 agonists alone.

*Continuous ketamine infusions* have shown some promise for analgesia, particularly for burn patients.

*Lidocaine infusions*are used to augment inhalant anesthetics (they reduce the amount of inhaled anesthetic needed) and to control postoperative pain. Single large doses (bolus) can cause hypotension (low blood pressure).