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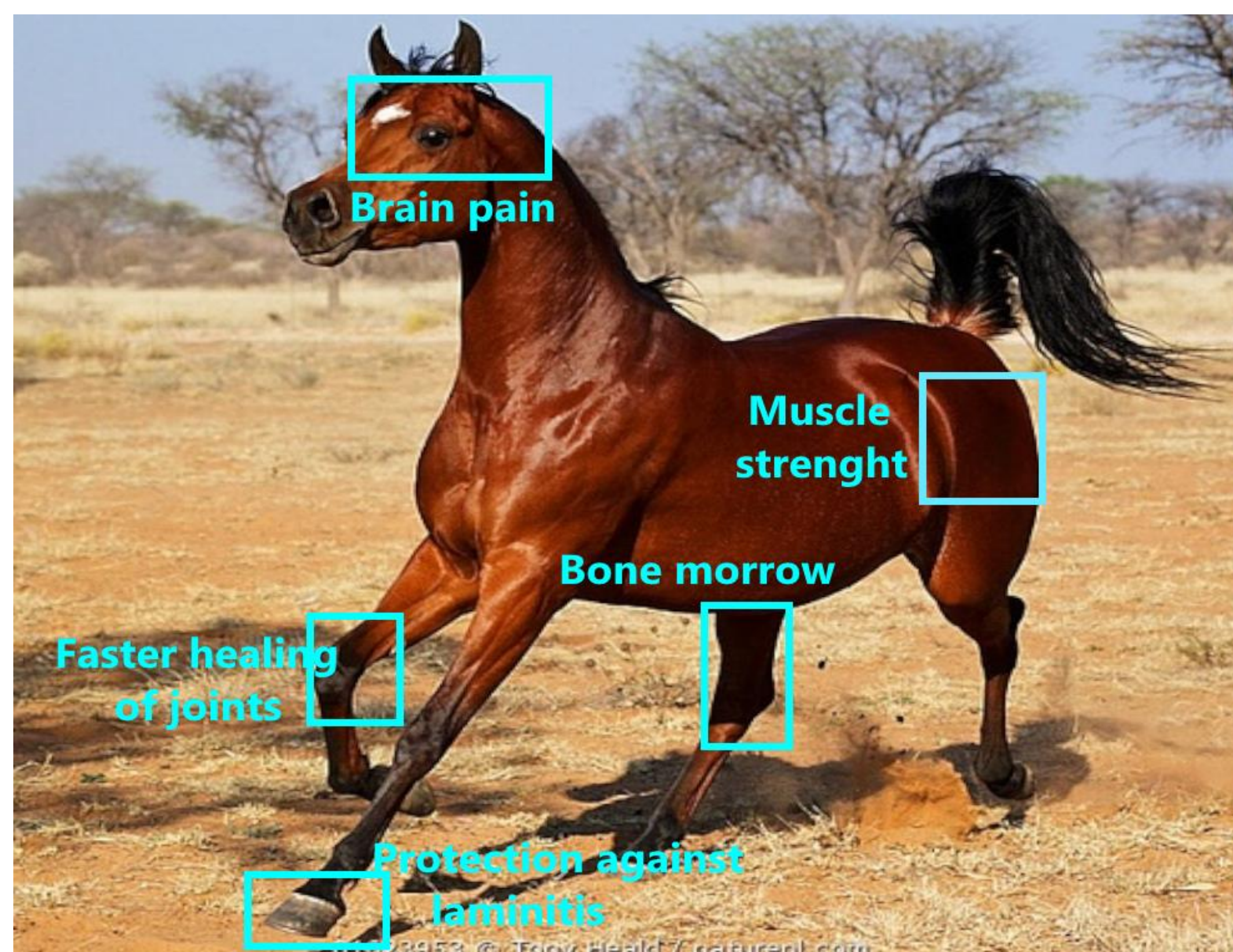
Is Steroids Administration Beneficial For Horses?

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Abstract: Steroids are man-made synthetic compounds, which replicate different hormones. Frequently, these compounds are used for accelerate the development of muscular mass, enhance the appetite, and also for different medical conditions of animals. Steroids work by blocking the body's main inflammatory cascade at a high level, reducing the production of many inflammatory mediators and also the action of inflammatory cells. The aim of this review paper is to present the potential use of steroids in horses as treatment of different medical conditions, considering the incrimination of doping in horses participating in various sports competitions.

• Steroids in horses

- slows down the organism's response
- reduces body-wide inflammation, as well as the local effects of swelling, redness, itchiness, irritation, and pain.
- different synthetic steroids have been derived from the basic molecular model of cortisone



• Administration of steroids in horses

- injectable administration of steroids
- oral administration usually only for long-term treatment, when need it
- steroids used in equine veterinary practice are:
 - ✓ dexamethasone,
 - ✓ methylprednisolone acetate,
 - ✓ triamcinolone acetate,
 - ✓ betamethasone.

• Effects of steroids in horses

- different steroids => different effects, duration of action, and potency
- used for different medical conditions, such as: allergic skin conditions, airways disease, anaphylaxis, brain and spinal cord injury, autoimmune diseases, shock, laminitis

• How steroids work in horses

- by blocking the body's main inflammatory cascade at a high level,
- reducing the production of many inflammatory mediators and
- reducing the action of inflammatory cells.
- This low down the body's response to an insult, and reduces body-wide inflammation, as well as local effects of swelling, redness, itchiness and irritation and pain.

• Steroids administration in horses laminitis

- per year 1 in 10 horses/ponies develop a laminitis episode
- 78% have difficulty in turning around and 72% have short and stilted walk
- 58% have increased hoof temperature
- 51% shifted weight from one foot to another

• Conclusions

- steroids administration is beneficial for horses
- it is part of a therapy for prevention and treatment
- overdoses becomes doping in horses