Advances in Lameness Diagnosis and Management

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Diagnostics

Digital Radiography
Advantages

- Speed
- Efficiency – fewer retakes
- Resolution
- Storage/Sharing
Ultrasound

- Soft tissues
- Joints
- Recent advances
- Healing assessment
- Guided injections
Diagnostics

Magnetic Resonance Imaging (MRI)
MRI – Different Types
Advantages

- Can see bone, cartilage and soft tissue
- Non-invasive
- No radiation exposure
Disadvantages

- Not a screening tool
- Limited by the horse’s size
- +/- General anesthesia
- Cost
Advances in Therapy

Extracorporeal shockwave therapy
ESWT - Indications

- Ligament injuries at insertions
- Tendon injuries
- Splints
- Heel pain
- Back problems
Mesotherapy

- Management of chronic pain
- Neck/Back problems
Platelet-Rich Plasma

- Stall-side procedure
- Contains growth factors
- Suitable for tendon/ligament injuries
- Recent injuries are best
IRAP/Autologous Conditioned Serum

- Stall-side procedure
- Multiple treatments needed
- Best for arthritis
- Very encouraging long-term effects
- No withdrawal time
Stem Cell Therapy

Wound repair by dermal cells

Muscle repair by muscle cells

Joint cartilage repair by chondroblasts

Tendon and ligament repair by fibroblasts

Vascularization and reperfusion by blood cells for increased blood flow

New bone formation by osteoblasts

COURTESY CEH HORSE REPORT/THEHORSE.com
Different Types
Stem Cell Therapy Indications

- Tendon/Ligament Injuries
- Arthritis
- OCD
- ?Laminitis/COPD
Regenerative Treatments – What to expect

- Improved but not faster healing
- Must be combined with well designed rehabilitation
Tildren

- Used as an osteoporosis treatment in humans
- Has proved useful in treatment of navicular disease, back problems and bone spavin