

Skeletal Muscle Relaxants

Key Questions and Inclusion Criteria

Update #2

Key Questions

1. What is the comparative effectiveness of different muscle relaxants in reducing symptoms and improving functional outcomes in patients with a chronic neurologic condition associated with spasticity or a chronic or acute musculoskeletal condition associated with or without muscle spasms?
2. What are the comparative incidence and nature of adverse effects (including addiction and abuse) of different muscle relaxants in patients with a chronic neurologic condition associated with spasticity or a chronic or acute musculoskeletal condition associated with or without muscle spasms?
3. Are there subpopulations of patients for which one muscle relaxant is more effective or associated with fewer adverse effects?

Inclusion Criteria

Populations

Adult or pediatric patients with a) chronic neurologic conditions associated with spasticity (including cerebral palsy, multiple sclerosis, traumatic brain injury, spinal cord injury, post-stroke), b) chronic or acute musculoskeletal condition associated with or without muscle spasms (including fibromyalgia, tension headaches, low back pain, myofascial pain syndromes and nocturnal leg cramps)?

Exclude: Obstetric patients, chronic pain conditions without muscle spasm, restless legs syndrome

Interventions

Diazepam, clonazepam, clorazepate, carisoprodol, methocarbamol, baclofen, chlorzoxazone, cyclobenzaprine, dantrolene, metaxalone, orphenadrine, tizanidine

Effectiveness outcomes

Relief of muscle spasms or pain, functional status, quality of life

Safety outcomes

- Overall adverse effects reported
- Withdrawals due to adverse effects
- Serious adverse events reported
- Specific adverse events (sedation, addiction, abuse) or withdrawals due to specific adverse events

Study designs

1. For effectiveness: Controlled clinical trial comparing an included muscle relaxant with another included muscle relaxant, another oral agent or placebo or good quality systematic review
2. For safety: Controlled clinical trial or observational study
 - a. Duration: For chronic neurologic conditions, at least 4 week study, for musculoskeletal conditions any duration