

Indiana Medicaid Therapeutics Committee
Therapeutic Class Review Summary

Therapeutic Class:

Skeletal Muscle Relaxants

Overview:

Skeletal muscle relaxants are used to treat muscle spasm and spasticity. Muscle spasm is defined as a sudden involuntary contraction of one or more muscle groups and is usually an acute condition associated with muscle strain (partial tear of a muscle) or sprain (partial or complete rupture of a ligament). Spasticity is a state of increased muscular tone with exaggeration of the tendon reflexes and is often associated with illnesses such as multiple sclerosis, stroke and spinal cord injury. The mechanisms of action of the agents in this class are widely varied and many are not thoroughly understood. One mechanism of action for these agents is interneuronal blockade at the level of the spinal cord. Additionally, these agents have CNS depressant properties that may contribute to, or are mainly responsible for, the skeletal muscle relaxant activity.

Baclofen, carisoprodol, chlorzoxazone, cyclobenzaprine, metaxalone, methocarbamol and orphenadrine all have the indication to treat muscle spasm. For most of the agents used to treat muscle spasm, use should be limited to two or three weeks. It is important to encourage proper utilization of these agents because skeletal muscle relaxants such as carisoprodol have been associated with abuse potential and addiction. Baclofen, dantrolene and tizanidine have the indication to treat spasticity. These agents, in particular, may be used for longer periods of time and play an integral role in managing the symptoms associated with spasticity as well as improving the functional status of patients.

GENERIC NAME	TRADE NAME	MANUFACTURER	GENERIC
Baclofen	Lioresal [®]	Various	Y
Carisoprodol	Soma [®]	Various	Y
Chlorzoxazone	Parafon Forte DSC [®]	Ortho McNeil, Various	Y
Cyclobenzaprine HCl	Amrix [®] (extended-release) Flexeril [®] (regular-release)	ECR Pharmaceuticals, Various	N (Amrix [®]) Y (Flexeril [®])
Dantrolene sodium	Dantrium [®]	Procter & Gamble, Impax Labs	Y
Metaxalone	Skelaxin [®]	King Pharmaceuticals	N
Methocarbamol	Robaxin [®]	Various	Y
Orphenadrine citrate	Norflex [®]	3M Pharmaceuticals, Various	Y
Tizanidine HCl	Zanaflex [®]	Various	Y

Summary: Skeletal muscle relaxants are a class of agents very useful in treating muscle spasm and spasticity. With the exception of metaxalone and extended-release cyclobenzaprine, all of these agents are generically available. However, some agents in the class have been associated with dependence. Selection of agents for the preferred drug list should take into consideration establishing quantity limits for the medications in this class used to treat muscle spasm. Quantity limits may be an effective mechanism to control the utilization and cost associated with this drug class.