**Table S6. ACOEM Guidelines’ acute low back pain recommendation changes over time for common treatments in study \***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2008** | **2011** | **2015** | **2018** |
| NSAID | Rec (A) | Rec (A) | Rec (A) | Rec (A) |
| Muscle relaxant\*\* | Rec (B)\*\*\* | Rec (B)\*\*\* | Rec (B)\*\*\* | Rec (B)\*\*\* |
| Manipulation/Manual Therapy | Rec (B/C) § | Rec (B/C) § | Rec (I) | Rec (I) |
| Toradol injection¥ | Rec (A) | Rec (A) | Rec (A) | Rec (A) |
| Opioid £ | Not Rec (C)  | Not Rec (C)  | Not Rec (A)  | Not Rec (A)  |
| Carisoprodol | Rec (B)¥ | Rec (B) ¥ | Not Rec (I) | Not Rec (I) |
| Glucocorticosteroids | Not Rec (B) | Not Rec (B) | Not Rec (B) | Not Rec (B) |
| MRI or CT ¤ | Not Rec (I) | Not Rec (I) | Not Rec (I) | Not Rec (I) |
| X-ray ¤ | Not Rec (C) | Not Rec (C) | Not Rec (B) | Not Rec (B) |
| Ultrasound (therapeutic) | No Rec (I) | No Rec (I) | No Rec (I) | No Rec (I) |
| Electrical Stimulation | No Rec (I) | No Rec (I) | Not Rec (I) | Not Rec (I) |
| NSAID | Rec (A) | Rec (A) | Rec (A) | Rec (A) |
| Specific exercises of directional stretching and progressive aerobic exercise are first-line treatments, but are unable to be assessed in this study as that level of detail is not available in the dataset from California. \*\*Not including Carisoprodol, which is not recommended as of 2015.\*\*\*Unless mild to moderate then not recommended.§Categories B/C are based on meeting vs. not meeting the Clinical Prediction Rule, which was subsequently not confirmed with subsequent research.¥Not specifically addressed. Recommendation inferred from category of medication.£Routine use not recommended. Recommended for severe back pain with more restrictive indications over this timeframe.¤ Absent red flags, including trauma. |