AMA Guides, 6th Edition: Chapter 17 Spine

I have just completed session 4 of 6 of the AMA Guides 6th Edition webinar instructed by Dr. Christopher Bingham. As mentioned in prior newsletters, Dr. Bingham is the primary author of the musculoskeletal chapters and the owner of www.impairment.com. I was already familiar with the new methodology having read the chapter and taken the first three sessions. There were some interesting questions and comments made during the presentation which are worth mentioning. This newsletter will look at the Spine chapter and address some of the issues surrounding its use when compared to the 5th edition.

The first item to point out is a typographical error which completely changes the context of one of the impairment categories for the cervical and lumbar spine regions. Class 3 impairments, which the book basically defines as multilevel involvement “with or without” radiculopathy, are incorrect according to the author. Dr. Bingham states that it should not be “with or without”. Rather, it should only say with. In other words, a patient with multilevel disc herniations, alterations of motion segment integrity, pseudoarthrosis, stenosis, compression fracture or dislocation that DO NOT have a documented ongoing radiculopathy will not qualify for a Class 3 impairment (15%-24% impairment). These patients will automatically be dropped to a Class 1 (1%-8%) or Class 2 (9-14%) impairment category.

Some of you may recall that the two major defining categories for placement in to a DRE Category II impairment in the 5th edition were asymmetrical range of motion (ROM) and documented spasm or muscle guarding. Both of the criteria were completely eliminated in the 6th edition. The authors suggest that the presence or absence of spasm is not reliably reported between examiners and therefore not a valid criteria for impairment. They suggest the same for ROM studies stating that the inter-examiner reliability has not been proven in the literature. These previously defining findings are presently insufficient, even for a grade adjustment with in a diagnostic class. I agree with their literature interpretation but would argue that the ROM reliability factor is overcome by the defined validity parameters (3 of 6 trials within 10% or 5 degrees). I also think this is a case of throwing out the baby with the bath water. Loss of ROM is a significant factor in determining the functional abilities of patients. I believe they have undermined the validity of the impairment process by eliminating this functional consideration.

In Connecticut, where regional impairments determinations are important for worker compensation cases, we have another problem. In the 5th Edition, Section 15.13 Criteria for Converting Whole Person Impairments to Regional Spine Impairments has no comparable section in the 6th edition. Therefore, towards the end of the lecture, I asked how jurisdictions like Connecticut should address the issue. Dr.
Bingham said that if he were asked to convert to regional impairments he would use the 5th edition criteria as defined for DRE. Therefore, below is summary of the text from the 5th Edition section 15:13 conversion methodology for your records.

“In some instances, the evaluator may be asked to express an impairment rating in terms of the involved spine region rather than the whole person. This is done by dividing the whole person impairment estimate by the percent of spine function that has been assigned to that region. Under the DRE method, a whole person estimate being converted to a regional estimate would be divided by 0.35 for the cervical spine, 0.20 for the thoracic spine, and 0.75 for the lumbar and sacral spines.”

Another notable point from the Spine chapter is the recommended use of the Pain Disability Questionnaire (PDQ). The PDQ is a functional inventory that is used as an outcome measure. The PDQ score will assist in assignment in the functional non-key factors allowing a grade adjustment up or down within a diagnostic impairment range. I am unaware if the PDQ has been validated against cultural bias. For those of you that work with patients from many different cultures (Hispanic, Asian, and European) this could present a major concern.

Classification into diagnostic categories requiring documentation of radiculopathy will require electrodiagnostic evidence from electromyography (EMG). The guides present a good review of EMG and I suggest that everyone review it. The concern I have with the EMG chapter is that there is a wide range of positive findings. I am also concerned that the results are dependent on the examiners skill and subjective interpretation. The guides define the various EMG findings and the associated physical findings. One problem is that even with a positive EMG, most people will be in the lowest grade range of non-key factors. This is because the mid and high grade range findings suggest very severe injuries; the kind that require surgery or long periods of hospital-based rehabilitation. The next newsletter will discuss the EMG requirements for placement within the impairment classes since this is a complex and important consideration.