

Importance of the Industrial History

As chiropractors working with the industrial patient in the arena of physical medicine, our patient history must not end at the immediate circumstances of presenting symptoms. The history must focus on what caused the musculoskeletal system to fail. It is the exception, not the rule, that an injury only has a traumatic and/or acute component. In the majority of cases, the presenting symptoms are the end results of a series of events. When a DC calls me to review a case that they have had less than expected success with, too often I find care has focused on the presenting symptoms with little or no attention paid to the cause(s) of the failure.

For example, a dairy farmer comes into my clinic and a history reveals he has back pain in his lower right back area. The pain has been there two weeks and is getting worse, especially after sitting and lying down. There is no radiation to the leg and pain usually decreases with walking. After performing the usual orthopedic and neurological tests, it appears he has an acute facet syndrome with secondary involvement of the right sacroiliac joint. The patient is treated four times over a one-week period, and the pain does not change. His frustration leads me to an occupational history, where he informs me of the typical tasks and duties of a dairy farmer. After probing with the right questions, I discover that three weeks ago, he got a new cow. Twice a day, when he puts the milker on, the cow kicks him and he lands against the wall, hitting his right lower back. In this case, if care does not address the cause, the care directed only at the symptoms will have little long-term effect.

Always be sure to look for any contributing facts that lead to the failure of a body part. Each industrial injury has its own "cow." The difficult part is that: 1) the "cow" is not always as obvious as the above example; and 2) there may be multiple "cows," each having varying degrees of responsibility for the presenting symptoms.

When looking at most industrial injuries, there is some sort of repetitive component that leads to the failure of a body part, even in the injury that appears to have an obvious "cow." For example, a 42-year old male that works in a paper mill finishing department bends over to pick up a container with waste material in it that weighs about 75 pounds. Upon bending to pick up the container, he develops severe acute low back pain. To date, the patient does not have a history of back pain of any significance. In this case, all too often the history stops at the injury, i.e., lifting the object. We treat the injury as a possible failure of the posterior motor unit and teach the patient proper lifting techniques. What is missed are the factors that led to the acute failure in the posterior motor unit.

If I were to ask most DCs what are the contributing factors to posterior motor unit failure, they would be comfortable writing out a fairly comprehensive list. The list would include: 1) long-term static postures; 2) non-symmetrical motions; 3) poor lifting techniques; 4) non-efficient sleeping postures; 5) deconditioning of the components of the posterior motor unit; 6) poor health habits, etc. Yet the history taken by most practitioners does not include the list of items above. Without covering the above topics, we often do little more than the surgeon whom we chastise for performing surgery on the patient, but never addressing the multiple life factors that led to the failure. Thus, returning the worker with a compromised structure to the same environment that led to the original failure succeeds only in creating a condition that is more prone than ever to fail again. Unfortunately, returning a worker to the same environment when only the injury has been

treated without consideration to the multiple factors that led to the failure is of little difference than the surgical scenario above.

The purpose of your history should not only be to determine the mechanism of the presenting injury, but to also find the contributing factors that led to the failure. The treatment should take the global history of the injury into account. Each treatment program should be customized to the individual's needs. For example, a 36-year old female presents with upper back and right shoulder blade pain. She has been employed for five years as a data entry operator; 80% of her day is spent working on a computer, while the remaining 20% is spent retrieving journals and records.

Her symptoms started two days ago, when she reached above shoulder height to retrieve a journal weighing approximately 15 pounds. The pain has been unrelenting since that time, affecting her sleep and all activities of daily living. In this example, all too often treatment is centered on the symptoms and possible restrictions on lifting above shoulder height, but the circumstances leading to the susceptibility of the shoulder girdle and/or cervical thoracic area are seldom addressed. She spends 80% of her day in front of a computer terminal, with a strong possibility of poor static posture and non-symmetrical posture. The other 20% of her day entails some degree of movement and physical lifting.

In looking at this case, I must first determine if lifting 15 pounds above shoulder height is outside the normal capabilities of the presenting patient. If the answer is yes, I must address this issue early in care. If the answer is no (as would usually be the case with 15 pounds), I must address the contributing factors that led to this failure in what would have been expected to be an acceptable activity. The workstation she spends 80% of her work duties at must be reviewed with the patient and, if possible, a view of the workstation personally or via video would be of great help. Workstations are built for the average person; therefore, any patient above or below average physical dimensions brings its own unique "cow." The patient's remaining 20% of duties are material handling, which also needs to be reviewed to address any other possible "cows." Next, the non-work activities of the patient need to be reviewed and addressed if they are found to have a possible effect on the predisposition to failure, and/or anything that may possibly cause a delay in the healing curve. The outside events may be as subtle as knitting or long-term television watching, or they may be more aggressive activities such as bowling (in Wisconsin) or beach volleyball (in places much warmer than Wisconsin). My own experience has also led me to pay attention to sleeping positions with any presentation of musculoskeletal symptoms.

The first step in determining the care needed for a patient is to address the acute portion of the injury. The second, which is probably of more importance, is the rehabilitative component. For example, non-symmetrical motion and postures may need to be addressed with non-symmetrical exercises and stretches. I call this approach the "rule of opposites," which means if a person always looks to the right and downward while at work, they need to stretch periodically to the left and upwards. Also, if you have non-symmetrical muscle development and give symmetrical exercises, you run the risk of increasing non-symmetrical development as the toned muscles will respond quicker to exercise than the non-toned muscles.

In rehabilitation, you also need to address the overall posture and movement that the patient goes through at their workstation, home, driving, sleeping, etc. At times, you may be able to address the patient's environment with simple things like a cervical pillow, changing computer height, or moving materials to more posture-friendly positions. If it is difficult to change the work environment; your only other option would be to help the patient become more resilient to their environment. This can be accomplished through general stretching to affect the area of injury along with strengthening exercises, neutral postural concepts, general health advice and stretches that follow the "rule of opposites." In future articles, we will discuss some of the concepts touched

upon in this article more in depth.

Chiropractic literature has always stressed the need to look at the whole multitude of events that take place before the body fails. Writings have stressed function rather than symptoms. The chiropractor that takes this concept with them into the industrial area will serve both the patient (and society as a whole) well.

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