Structural Sources of Pain

Dogma

It is an almost universally held belief among surgeons and patients that a specific structural lesion is usually the source of pain. If that lesion can be identified and repaired, the pain will abate. This seems plausible. A diagnostic test ought to be able to identify the source of intense pain and point to a solution. This simply isn't the case.

I Believed that Pain was always Structural–I was wrong

During my first five years of practice, it was my assumption that if a patient had experienced low back pain for six months, then it was my role to simply find the anatomic source of pain and surgically solve it. I was diligent in this regard. The test I relied on most heavily was the discogram. The discogram is a test where dye is injected into several discs in the lower back; if the patient's usual pain is produced at a low injection pressure, it is considered a positive response. The only patients I did not fuse were those who did not have a positive response or had more than two levels that were positive. I performed dozens of low back fusions and felt frustrated when I could not find a way to surgically solve my patients' low back pain.

I have a physiatrist friend, Jim Robinson, who is a strong supporter and contributor to the DOCC Project. From 1986 to 1992, we both served on the Washington State Worker's Compensation clinical advisory board and helped set standards for various orthopedic and neurosurgical procedures. Our discussions were based on this assumption that there always is an identifiable "pain generator." It is just a matter of figuring out what test is the best one to discern it. We did not think in terms of structural versus non-structural sources of pain. We knew about the role of psychosocial stress but did not fully appreciate how large a role it played.

Structural Problem

I define a structural lesion as one that is distinctly identifiable on a test, which correlates the patient's pain symptoms with the lesion. An example would be a ruptured disc pinching a nerve that causes pain down the leg. A ruptured disc between the fourth and fifth lumbar vertebrae will cause pain down the side of the leg. This is the pathway of the fifth lumbar nerve root. A ruptured disc between the fifth lumbar and first sacral vertebra will cause pain down the back of the leg, which is the pattern for the first sacral nerve. If in either of these two examples the pain was going down the front of the leg, it would not be considered the cause of the pain because that is the path of the fourth lumbar nerve root and it does not match.

Pain Problem

Many of you experience pain whose source is not identifiable on any test modern medicine has to offer. We cannot cut into your physical body and eliminate your pain, but your pain is still real. When there is no structural source of your back pain, we cannot treat your back, so me must treat your pain. This idea is at the heart of the DOCC Project.

—Dr. David Hanscom