



DOCTOR-PATIENT

## Digital X-Ray in the Modern Spinal Expert Practice (Pt. 1)

Steven Kraus, DC, DIBCN, CCSP, FASA, FICC

In my 34 years as a chiropractor and having owned 18 clinics, I have observed many "phases" in our profession. I've seen fads come and go, techniques or tools gain and then subside in popularity, and beliefs change relative to a multidisciplinary approach to health care vs. staying chiropractic only. The approach to taking X-rays is no exception.

Twenty years ago, it was common practice to X-ray all patients coming in the door. In fact, you better have had a good reason to *not* X-ray a patient. Today, however, some chiropractors are taking fewer and fewer X-rays for myriad reasons: mostly due to the perceived expense of an X-ray system; the false belief that it isn't needed; or the now-outdated myth that radiation from taking plain-film X-rays is hazardous to your health.

What Chiropractors Are Saying



That said, it's interesting to note that a recent online survey I conducted of 364 North American-based chiropractors revealed the following:

- Doctors reported patients had more trust in the doctor-patient relationship when X-ray images were obtained.
- Practice efficiency improved significantly when adopting digital X-ray over plain film.
- Practices realized significantly improved patient compliance when using digital X-ray as a patient-education and communication tool.

On this last point, this is something we know all too well. In fact, it's something we as chiropractors have always faced: Our patients begin to feel better after we begin a schedule of adjustments, and as a result some fail to complete their recommended care plans. This has a direct impact not only on patient health and long-term outcomes, but also on our practice profitability.

Show and Tell

Many patients base the continuation of their care plan not on what we say, but rather on how they feel. Why do so many patients take it upon themselves to determine when they should remove themselves from our care?

The answer is simple: They don't see the whole picture; or rather, *they don't see a picture at all*. And the impetus is on us as chiropractors to give them one.

A 2016 Gallup-Palmer poll revealed how consumers view chiropractic: nearly two-thirds of all patients walking into chiropractic practices reported they have not had any pressure placed on them from their chiropractor to receive more services than they want, nor had any unexpected costs.<sup>1</sup> So, it's important to be up front when explaining the care plan, and the value and evidence behind your reasoning for care. Digital X-rays help explain this evidence.

This begs the question: How can we best give patients this understanding? Studies have shown that three out of four people (read: *patients*) are visual learners. But what do most of us do when seeing a patient for the first time? We tell them our diagnosis and recommended care plan – *instead of showing them*.

We all know patient compliance directly impacts practice profitability. It also impacts patient referrals and even practice efficiency, as many simply don't show up for their appointments without notice. Patients often don't tell you their "why" – they simply stop showing up.

A colleague addressed the lack of patient compliance without realizing it. He had a technical issue with a film-based X-ray unit, and decided to implement a retrofit unit and upgrade to digital X-ray technology.

Soon after, he was using the annotations on the patient's digital X-ray images of their spine – and he would show the findings for such things as unlevel pelvis or reversed cervical curve or scoliosis-type findings. He would show them, not just tell them. It wasn't until a few months later that he realized: Patient compliance skyrocketed after adopting and using digital X-ray. And given that most people are visual learners, this approach makes sense.

#### A Case in Point

Here's an example with a patient who didn't have red flags upon presentation, but does have a history of recurring back pain.

The patient presented with a significant increased lumbar lordosis, a "sway-back," or more technically, an increased lordotic angle, and a lumbar hyperlordosis measurement. We didn't know the patient had a hyperlordosis until the lumbar images were obtained. It took less than 10 seconds to measure the lordosis and have the digital X-ray software calculate the biomechanical abnormalities.

Studies show that if the lumbar lordosis is greater than the normal range and goes beyond 65 degrees and above,<sup>2-3</sup> the person has a higher probable chance of developing LBP and degenerative changes in the facets. We also know when that happens, the disc degenerative changes often follow, often leading to higher incidence of more chronic LBP.<sup>4-9</sup>

Knowing the status of the patient's spine helps shape the care plan to include special abdominal and back exercises to affect the lordosis, as well as positional ergonomic instructions.<sup>10-13</sup> We would not have had the exact care plan recommendation development without knowing the X-ray findings of the hyperlordosis and resultant predictive outcome toward the likelihood of DJD and potential disc pathology development.

As a spine care specialist, we need to know the parameters affecting the overall state of the patient's spinal health (hyperlordosis being just one factor) to give a well-rounded, comprehensive preventative approach to affect long-term outcomes – vs. only addressing the current episode of LBP that was absent of any red flags.

Showing this objective evidence and peer-reviewed literature helps a patient see and understand. Now that patient is more motivated to engage in back and abdominal exercises to improve the lordosis, and to continue with care to affect a positive outcome and minimize future degradation of their lumbar spine, which could become irreversible if neglected over the upcoming decade. But you made them aware because the X-ray image allowed for a case of "seeing is believing."

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