

FOREWORD

My life changed forever twenty-five years ago, when I was taken unconscious to hospital by ambulance. After a decade of niggling back pain, the result of a rugby injury, a disc had ruptured in my lumbar spine. The pain was so excruciating I passed out.

The day before the operation I refused to have one, and against medical advice, and assisted by my wife, I left hospital. This turned out to be the wisest decision I ever made. At the time I was unaware that “the actual proportion of all back pain patients who are surgical candidates is only about two percent.” (Ref. Professor Richard Deyo of the University of Washington Medical School). This statement by an eminent professor of medicine specializing in back pain, when considered in conjunction with the claims by many orthopaedic surgeons of an eighty percent success rate, at the very least puts a huge question mark over why people readily agree to undergo invasive surgery.

The answer is, of course, ignorance. Later on in this book I will examine in detail the whole shadowy subject of invasive surgery and why “In any case spinal surgery can't really cure your back- at least not in the sense that an appendectomy can cure appendicitis. Alterations that take place in your spine during surgery may even cause or contribute to new back trouble at some time in the future.” (Ref “The Back Doctor,” a book by Hamilton Hall FRCS(C) an internationally recognized authority on the treatment of back pain, and a member of the International Society for the Study of Lumbar Pain).

The almost unbearable pain extended from my lumbar spine down my right leg. Terrified, unable to sit, sleep or walk, I thought my life was at its end. I had turned my back on the medical profession and, knowing absolutely nothing about back pain or its causes, wallowed in a state of self pity and excruciatingly painful terrified hopelessness until I eventually came to the conclusion that, since nobody could help me, I would help myself.

I researched the subject of back pain, and quickly discovered that sitting with bad posture is the main cause. Later on in the book I reproduce the results of a Swedish study that proves that sitting with bad posture creates greater pressure in the spinal discs than any other body position.

I reckoned that if I sat with good posture it should help. I was right. It did. I made a lumbar support for my car. It worked, giving me the incentive to perfect the product and help other back sufferers. I have been working in the area of back pain, its cause and prevention, for the last twenty-five years.

My research during this period shows that:

- (1) Every spine has its own unique elongated “S” shape. Backprints are as unique as fingerprints.
- (2) When that unique “S” shape is preserved there is the minimum possible stress on the spine.
- (3) In engineering terms the spine is a vertical flexible column that is prone to develop a fault. The fault occurs mainly in the sitting position, when the “S” shape spine slumps forward into “C” shape. This creates huge stress in the spine with resultant back pain.
- (4) When the spine is kept at all times in its own “S” shape the result, in the majority of cases, is pain free living. I am now totally pain free, but I have to work hard to achieve this by never, ever, allowing my spine to collapse from an “S” to a “C” position.
- (5) The solution to a back problem cannot be handed over to a third party. You can seek help from one of the many experts working with back pain, but they are merely relieving the symptoms. Only you can eliminate the cause.
- (6) You must not arrange your body around the work.

The problem was to design a product that would allow everybody to sit with their spines in the “S” position. I had made a car seat for

myself that did this. However, as the length, shape and curvature of every spine is different, this posed a huge problem.

I instinctively knew I had one of the best ideas of all time. Eighty percent of the world's population suffers from back pain at some time in their lives and the possibility lay within my grasp to relieve this pain. But how could I achieve this?

I am a chartered engineer and combined my affliction with my engineering skills to design and patent a system, Spinal System-S, which provides the information to manufacture a range of office, home and car seating that guarantees perfect sitting posture. As sitting with bad posture is the main cause of back pain, sitting with perfect posture means pain free sitting. Some ten thousand back sufferers now benefiting from Spinal System-S will bear witness to this.

During my research work I read many medical papers on back pain, its causes and prevention. I also studied a large number of books on the anatomy of the spine. I found the going could be very tedious, which I suppose is a characteristic of many textbooks. My objective in writing "The Engineering Solution to Suffering Back Pain" is to explain to the reader in a simple way my approach to the relief of back pain, how the spine works, the causes of back pain, information on medical research, back operations verses non invasive approaches and why there is no such thing as a quick fix for pain caused by a mechanical malfunction.

I took responsibility for my own life, researched the causes of back pain and applied them to invent and patent a system that guarantees perfect sitting posture. Of course a huge amount of pain is due to reasons other than sitting with bad posture.

I then researched how the majority of the world's population abuse their spines on a continuous basis when not sitting. Using this information I designed a system, Spinal System-Life, which lays down three principles that provide pain free living. I explain Spinal

System-Life in detail in the following pages. It has resulted in me living a pain free active life.

Had I gone under the knife twenty-five years ago I could now be like the many unfortunate examples of botched operations I meet on a regular basis.