

Back problems: how Darwinism mised researchers

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Darwinism misled researchers into developing a harmful set of treatment techniques for certain back conditions. These therapies were based on the idea that humans at one time walked on all fours and that back problems were produced primarily by complications resulting from humans' newly evolved upright posture. Back problems supposedly exist today because humans now walk upright on vertebrae that originally had evolved to walk quadrupedally. This theory has led to a treatment protocol that now is recognized as often impeding healing, and has caused enormous pain and suffering. Treatment techniques used today are in many ways the opposite of the older, now disproven Darwinism-influenced techniques.

Up to 90% of all Americans suffer at least one debilitating episode of back pain during their lives.¹ For decades, evolutionists have taught that the reason for this was the evolution of bipedalism, which was superimposed upon a skeleton previously well-adapted for quadrupedal motion.^{2,3} In the words of Krogman: 'Although man stands on two legs, his skeleton was originally designed for four. The result is some ingenious adaptations, not all of them successful'.⁴ Krogman suggests that when humans started walking upright 'a terrific mechanical imbalance' resulted, and when humans began walking on two legs, backaches became common. Krogman also claims that when our prehuman ancestors were walking on all fours, the skeleton was arched like a cantilever bridge with the trunk and abdomen representing the load suspended from the half-circle weight-balanced arch. The main bridge had a jointed, crane-like extension (the neck), and a balance of forces was achieved throughout the system **only** when walking on all fours.

The advantages of this cantilever system were lost when humans started walking upright, Krogman claims, and the backbone was forced to accommodate itself 'to the new vertical weight-bearing stresses'. Krogman determines that evolution accomplished this in humans by breaking up the single curved arch of the back into the s-curve we now possess. Krogman adds that we are born with the

simple ancestral curved arch (*kyphosis*), but at the age of four months, when we begin to hold our heads erect, a new backward curve called a *lordosis*, develops in the neck region of the backbone (the cervical vertebrae).

The evolutionary theory then suggests that we developed a new lumbar lordosis curve in the lower trunk (the lumbar spine), while retaining a kyphotic curve in the upper trunk of the backbone and pelvic region.⁵ As Smail notes, evolutionists view the human lumbar spine curvature 'as an imperfect adaptation in man's supposed struggle to progress from four-footed stance to two-footed stance'.⁶ In the words of one popular author, back trouble began when our 'ancestors decided to stand erect. Instead of a nicely balanced suspension bridge' the back became 'a tent pole'.⁷

Since the spine was 'deformed' when humans began to stand and walk erect, Darwinists concluded that the logical treatment for back pain would be to **decrease** or, ideally, **reverse** the lordosis curve.⁴ To reduce the lordotic curve, Williams devised a series of exercises now called 'Williams flexion exercises' that have been used widely in many medical back treatment programs. The goal of many of these exercises was to **decrease**, or even reverse, lordosis as much as possible.^{8,9} This therapy was used widely for years in spite of its limited success, partly because it was completely logical—from the evolutionists' paradigm. Mooney¹⁰ even claims there never has been a scientific study that demonstrated the effectiveness of this or any other treatment that developed from the Darwinist theory of back problems. Physical therapist Smail¹¹ notes that despite widespread use of the flexion (bending forward) exercises to reduce lordosis, back pain remained a severe problem. This approach often failed, and consequently all too often surgery was used. Unfortunately, the success rate from such surgery was often less than half, and many patients were worse off than before.¹²

Fortunately, a Wellington, New Zealand physical therapist named Robin McKenzie¹³⁻¹⁵ discovered that posture exercises that **restored** full (normal) lordosis actually **decreased**, or even eventually abolished back pain in many patients. This was the exact **opposite** of what had been recommended by Williams and other therapists based on Darwinian explanations. As Smail notes, McKenzie is not a creationist,

'... but his work supports the creationist view that the lumbar lordosis is not a deformity with inherit strain from past evolutionary development. The lumbar spine is, instead, a most efficient means for supporting weight and providing for movement in erect, bipedal posture.'¹⁶

It is now recognized widely that back problems generally are not due to maladaptation caused by upright posture, but rather to abuses of the body that are common in modern life. This includes lack of exercise and poor posture, stress, and the requirement that one be in unusual positions for long periods of time, such as bending forward on an assembly line or on a computer. In short, anything

which **decreases** normal lordosis causes problems. Other major factors that lead to back problems are bone deterioration that can affect the back, smoking (which contributes to osteoporosis) and obesity.¹⁷

One indication that modern society is largely to blame for back problems is the finding that physicians in Third World countries rarely report chronic back pain.¹⁰

The Darwin-based Williams' theory also recommended extra rest and sleep to deal with back pain, which resulted in placing patients on bed for weeks at a time. Now **exercise** (including brisk walking) and normal sleep patterns are recommended. Research by Sobel and Klein has found that walking was highly beneficial in the vast majority of cases and helpful in the long term for 98% of the 500 cases they studied.¹⁸ Modern treatment is designed to improve both sitting and standing postures, educate patients in correct lifting mechanics, develop good sleep habits, use a firm-but-comfortable mattress, and most important, to stay in shape with regular physical exercise (including both moderate muscle building and a stretching program). Exercise allows a maximum number of muscles to carry the weight rather than just a few, the latter of which invariably triggers a set of forces that can affect back health adversely. Furthermore, stretching allows for flexibility so the back system can function correctly. Based on an evaluation of the therapy effectiveness of close to 500 low-back-pain patients, Cornell University medical school professor Willibald Nagler concluded that in the vast majority of cases, exercises can treat even severe back pain.¹⁹ In a review of the literature, the Baptist Medical System Back School notes that research 'has shown conclusively that exercise and correct body mechanics is the best prevention'.²⁰

The conclusion that back problems are not due to our alleged evolutionary past is now accepted by evolutionists and creationists alike. Professor of osteopathy and Darwinist David Shuman and his co-worker suggest that there is

'... no question [that] ... the human back, given proper care and rightly understood, is an astonishingly effective mechanism. As much as the more frequently lauded human brain, the human back is the hallmark of our true nobility and a major factor in the ... supremacy of ... man.'²¹

They conclude that:

'... given proper care, a fair shake, and just a little understanding, your back will take on any job you ask of it When it fails, in practically all of the more severe cases the failure is due to some sort of weakness.'²¹

Modern research has found that back problems are due largely to lack of exercise, a highly sedentary lifestyle and, in some cases, an inherited weakness. This 'truly marvelous hunk of machinery, an amazingly durable arrangement ready to serve the purposes of a ditch digger or a banker, a prizefighter or a stenographer, equally well' requires only regular maintenance.²²

Modern treatment

The use of treatment therapies that regain normal lordosis has gradually found acceptance in the world medical community.²³ Controlled scientific research has supported the McKenzie approach in comparison with other approaches, including the old evolutionary-based Williams approach.²⁴⁻²⁹ It is now widely recognized that by teaching patients to maintain lumbar lordosis via use of back support and exercise, pain can be markedly reduced, and that in many cases full healing can occur, even of a herniated disk.³⁰ However, symptoms may be totally or partially removed, but the degenerate 'aging' process is not reversed. To maintain a lordotic curve, many authorities now recommend moderate lordotic support by use of a long round pillow called a lumbar roll.³¹ As a result, many chairs and automobile power seats now have built-in lumbar support systems.

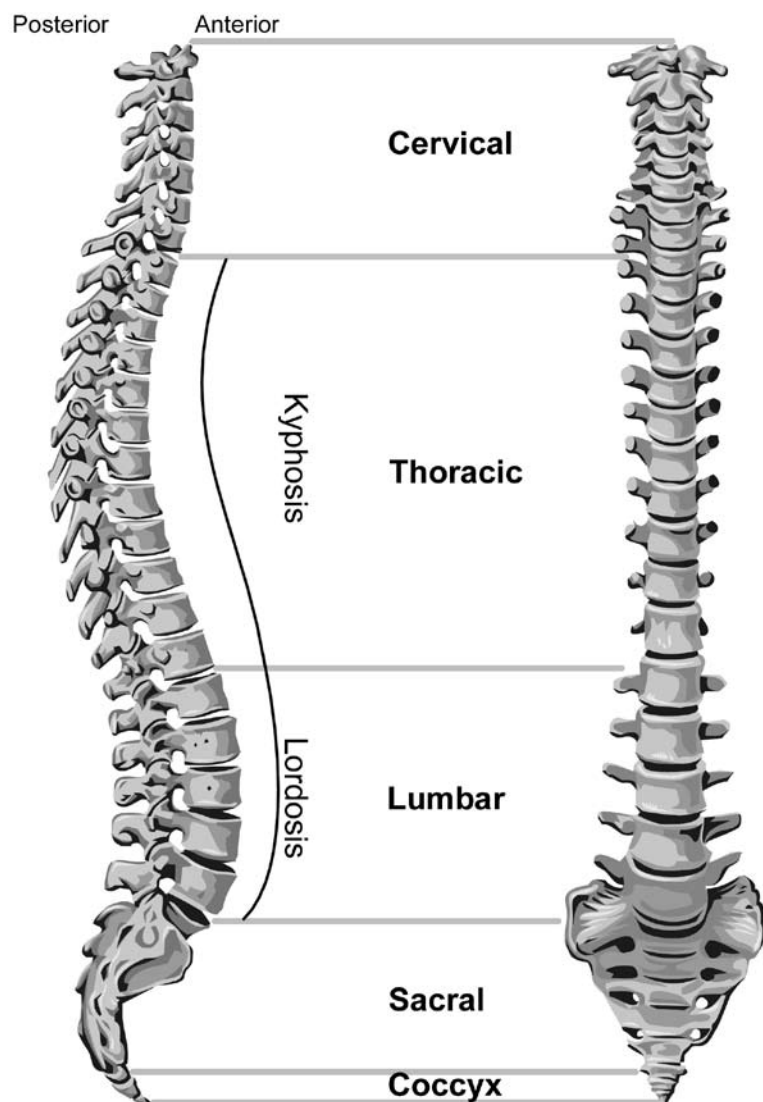
In short, we used to 'blame evolutionary design for our back problems'—specifically the 'claim that the spinal column originally evolved to support people who didn't stand upright and walk on two legs'.³² Now we know, and recent studies support this conclusion, that 'our back problems result from our modern, sedentary style of living. This is good news—it means that you can prevent most back problems by learning habits and taking actions that will help your back stay healthy'.³²

This insight is reflected, for example, in the training of Olympic weight lifters who learn to maintain the natural curve of their backs while lifting in harmony with the McKenzie theory and in contradiction to the Darwinist-based Williams theory. No doubt the therapy that developed from evolutionary assumptions has caused a great amount of not only back pain, but also permanent back injury, and likely has motivated surgery that may have resulted in more harm than good. The Baptist Medical System Back School manual notes that one of 'the **major** contributors to back pain (emphasis theirs)' is stress and fatigue and that the most common cause of lower back pain is

'a sudden bending or lifting during a period of extreme tension or fatigue. The back is the focus of stress for some people. As soon as they are feeling pressure and anxiety about some event in their lives, the back responds by "going out".'³³

Further research has also found that some muscles function for movement, others serve to protect the integrity of joint structures. Richardson *et al.*³⁴ have found that a major problem often involved in back problems is a breakdown in the small intrinsic muscles of the spine and/or in the manner in which their activity is controlled. They have developed an exercise program to strengthen these muscles, a program that they have experimental evidence is highly effective in treating backpain.

Why the Williams' theory was wrong



The human spinal column view from the side (left) and the front (right). The curvature of the spine can clearly be seen with lordosis in the lumbar region and kyphosis in the thoracic region.

Williams' treatment was based on the conclusion that simply standing up straight 'causes most low back problems',³⁵ i.e. humans have back problems because of their erect posture, a posture 'different from that of any of earth's other creatures'.³⁵ Many problems result from erect posture because humans are 'physically ill-equipped to walk upright'.³⁵ Part of the solution, he concluded, is to walk with the body tilted forward. To achieve this forward posture, the individual must force the lumbar spine backward, thereby changing the weight distribution on the vertebral column. Williams also believes that walking upright is an 'extremely difficult skill to master'—which is why 'it takes a human child about three years to become an accomplished walker; whereas most other land animals become quite competent within the first few weeks following their birth'.³⁵ He compares the human's standing erect problems to trying to

'stand a soft drink bottle on its neck'.³⁵

The reason for back problems, Williams stressed, is because the sacral area of an infant is curved the wrong way, i.e. backwards, which would be natural if humans walked on all fours (the vertebrae are similarly shaped in animals that walk on all fours). When walking upright, the feet still move forward, but the lower back is shifted **upward** instead of **forward**, producing the problematic lumbar hollow in the small of the lower back.

The theory suggests that, as a result of the s-curve produced in the back from walking upright using a back that evolved to walk on all fours, the distribution of weight is not even across the entire surface of each disk—and the uneven pressure forces the disk out at the posterior side. The result is a herniated disk where the disk annulus tears and the jelly-like disk nucleus protrudes or extrudes. Back pain usually results from this intervertebral disk being forced out, putting pressure on nerves, especially on the nerve roots which form the sciatic nerve in the buttocks and leg. In a child, the disk consists of a tough, gristly outer skin that surrounds the nucleus, which is a soft jelly-like substance.³⁶ With age, and loss of water, the outer substance becomes firmer until it is closer to the consistency of a wad of chewing gum.³⁷

If the disk erupts in a child, the jelly-like substance exerts very little pressure on the nerve, and the disk is soon 'repaired' by the body. In an adult, the disk continually presses on the nerve, and is 'repaired' very slowly or may slowly shrink with time thereby reducing symptoms.³⁸ The tear may heal, but the disk is far from normal. The body cannot put the 'jelly' back into the 'container' and seal it again to make it perfect. Consequently, and in accordance with Williams' Darwin-centered

theory, one should stay in bed, often for a considerable length of time, in order to allow the naturally defective spine time to 'repair' itself.

Williams asserts that mankind, in forcing the body 'to stand erect, severely deforms' the spine, 'redistributing body weight to the back edges of the intervertebral discs in both the low back and neck The fifth lumbar disk (and sometimes the fourth lumbar disc as well), ruptures', and the nuclear material 'ruptures into the spinal canal causing pressure on the spinal nerves'.³⁹ As mentioned previously, the solution Williams recommended was primarily to 'always sit, stand, walk, and lie in a way that **reduces** the hollow [or curved lordosis] of the low back to a minimum' (emphasis mine).⁴⁰ This 'first command' is repeated throughout his classic textbook (for example, see pp. 24 and 35). Since he

concludes that ‘the normal pressure of standing erect has caused one or both of the lowest two intervertebral discs to rupture’, walking and even standing would be the worst thing one with back problems could do.⁴¹

This theory is often repeated by evolutionists in support of the view that humans evolved from ancestors that walked on all fours. The problem is that this theory, although logical from an evolutionary framework, is entirely wrong, which is why its application to solve back problems has produced an enormous amount of harm. It now is recognized that the curvature of the lumbar vertebrae is critically important for back health, and the problems do not result from **too much** curvature as Williams’ theory states, but from **too little** curvature. The lordosis helps to **prevent** disk rupture by subjecting the disk to pressure to keep it in place. This is done by placing the body load directly over the central weight bearing axis through the hip joints, thus minimizing oblique or vertical shearing loads on lumbar disks, but still allowing movement of the spine.

Williams provides numerous drawings and illustrations of various ways that one can eliminate the lumbar lordotic curve. He even recommends a sitting position that normally should be assumed, a posture commonly called ‘slumping.’ This and many of the other postures he recommends are the **opposite** of what is recommended today (and some of the positions and therapies he recommends are now widely recognized as the **cause** of back problems). Williams also claimed that ‘lying flat on the back also increases low back pain in many individuals’.⁴² Today, the recommendation is to sleep on one’s back.

Williams even states ‘two of the most popular forms of exercise—walking and jogging—are not recommended for low back pain sufferers, because most people, especially those in their middle and later years, walk or jog with a hollow in their low back’.⁴³ We now also realize that walking and similar exercise are often the **best** therapy for back problems.¹ It is also recognized that proper back care can relieve or minimize symptoms of a protruding and even a herniated disk ‘in a large number of patients’, but rarely does it remove them completely and permanently.^{30,28,44-46} In the words of Caplan ‘the body has an amazing ability’ to heal a protruding disk.⁴⁷

The fact that weight lifters routinely lift hundreds of kilograms without incident because they are in good physical shape also belies many of the assumptions behind the Williams argument. It also supports the conclusion that the reason back pain occurs in most cases is due to improper lifting, lack of exercise, inflammation, and/or weak back and abdominal muscles.^{48,49} The deep inner back and abdominal muscles act like the body’s natural corset, supporting and stabilizing the spine to help the disks remain in position, and also equally distributing the weight, which enormously reduces the likelihood of disk protrusion.

The use of back problems as proof of Darwinism

Back problems are often mentioned as proof of ‘design flaws’ in humans, and consequently are used by Darwinists as evidence for human evolution.⁵⁰⁻⁵² A typical example is Elaine Morgan who, in her 1994 book *The Scars of Evolution*, repeats the now-refuted conclusion that

‘... lower back trouble arises because the kink in the lumbar region of the spine makes it structurally weak and unstable. If extra strain is imposed on it, the lowest vertebrae is liable to slip backward along the slope of the next one up. Such displacements may bring pressure on the nerves emerging from the spinal column, giving rise to pain which may be eased or cured by rest, but is liable to reoccur.’⁵³

Other evolutionists claim that ‘our bodies deteriorate because they were not designed for extended operation ...’.⁵⁴ Specifically, they mention our upright posture that was ‘adopted from a body plan that had mammals walking on all fours ... our backbone has since adapted somewhat to the awkward change ...’ They add that these evolutionary ‘fixes do not ward off an array of problems that arise from our biped stance’.⁵⁵ Price⁵⁶ proposes that one of the most persuasive evidences for evolution is what he calls the ‘problems of human design’. This argument was summed up by one of the leading modern Darwinists as follows:

‘If you were going to design a two-legged creature from scratch, rather than fashion one out of a four-legged creature, you’d do a better job than was done with us. (That’s why so many of us have back trouble.)’⁵⁷

One major problem of poor human design that Price mentions is back problems.⁵⁸ And, as pointed out by Woodmorappe,⁵⁹ dysteleological arguments (attempts by evolutionists to deny the existence of a Designer by calling attention to supposed flaws in living things) are presented to side-step the central issue. In this case, Darwinists try to shift the focus from the real issue, *viz.*, how spine-bearing creatures could have evolved from spineless ones (a position for which no substantive evidence exists), to why our Designer designed a human spine in its current form.

This commonly used argument for Darwinism is actually a theological argument, the reverse of Paley’s watch argument—which tries to prove a Designer by demonstrating design in nature. The evolutionists’ argument endeavors to demonstrate that God does not exist by documenting supposedly poor design in humans. Dembski⁶⁰ notes that the modern knowledge of anatomy has shown that in this area, Darwinism is without merit. Another problem for evolutionists is that animals that walk on all fours can also have some of the same back problems as humans.⁶¹⁻⁶⁶

What about cases in which a person does exercise properly and otherwise takes care of their back and still suffer backpain? Some evidence exists that a mutation is responsible at least for some forms of back problems,

specifically intervertebral disk conditions and sciatica.⁶⁷ The further we move from the Fall the greater becomes the mutational load and the more likely ‘poor mutations’ for disk strength and longevity become the norm rather than the occasional.

Conclusions

The Williams theory is only one of many examples of evolutionary reasoning which, although seemingly convincing (and a reading of Krogman’s article shows that they were very convincing, even to some creationists), are wrong. The late Verna Wright, then co-director of bioengineering at Leeds University, called the claim that upright posture is the culprit for frequent back problems in humans ‘nonsense’.⁶⁸ The Williams therapeutic approach may be appropriate for certain abnormalities, such as spinal stenosis found in older people. Nevertheless, someone who has experienced back problems usually can detect very quickly that many of the positions Williams recommends are those that **cause** back problems, and many of the ones he claims are ‘incorrect’ actually can help solve the problem.

This misleading theory of back pain causation and treatment has caused untold suffering and possibly permanent damage to millions of people. In many cases, conscientious long-term utilization of the McKenzie approach has been highly effective in alleviating the problem, whereas use of the Williams’ approach was often a total failure.

This is only one of many examples where Darwinism has misled research, and has produced conclusions that have resulted in much harm.

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