

MANIPULATIVE THERAPY

Treatment of patient with chronic low back pain

History:

Mrs X is a 36 year old mother of 2 children both under 5 years of age. She presented With a history of low back pain dating back over 5 years. She had experienced two Serious falls from her horse; but there was no immediate low back pain following either Incident. In the intervening period, she had received osteopathic and chiropractic treatment. She had witnessed some temporary relief from these treatments but nothing of a long-term nature.

She works part time as a computer analyst; runs a busy home life with two active Young children and owns a horse, which she had enjoyed riding and competing in Events.

Her GP was not aware of any other medical conditions, which would be contraindicating treatment. She was not taking any drugs for any medical condition.

When first seen at the beginning of Feb 2000, Mrs X was quite depressed having Recently been told following a myelogram, that she had 2 prolapsed discs between lumbar vertebrae L4 and L5. The Orthopaedic surgeon in charge of her case had indicated that If the position did not respond to physiotherapy, she would require surgery to alleviate The position. The pain to her lower back and left hamstring muscles was both acute and Debilitating. Mrs X had not managed to secure an early appointment for treatment under The NHS, and decided to be treated privately.

In discussion, it was obvious that Mrs X found it difficult to see any change in her circumstances (she was very reluctant to have surgery) and felt guilty that she was unable to give her children the full love and attention they needed (e.g. in lifting or embracing them). She was also more or less resigned after a period of 5 years, to living life as a "semi-invalid".

Consultation:

Mrs X was in obvious pain. She could not:

- Stand without feeling pain in her lower back and down the back of her left leg;
- Sit in comfort for anything other than short periods of time;
- Lie in bed comfortably. Her sleep patterns were interrupted;
- Get in and out of her car without discomfort.

She had taken prescribed painkillers and anti- inflammatories for a period, but had Stopped these because she felt they had done little to ease her pain and discomfort.

During this time she had tried to remain as active as possible in an effort not to give in to the pain; and Also out of necessity, working part time and running a busy home life. She had a supportive husband and two active children.

She was a very keen horse rider, but had found it increasingly impractical to ride her horse at all. Cleaning the stable and caring for her horse generally had become difficult even with the support of her husband.

Mrs X felt frustrated and depressed that there was so much she wished to do both as an individual and as a young mother but was unable to do so. However, it was also clear in speaking to Mrs X that she was determined not to be beaten by her condition and there was a strong sense that she was ready to make every effort to change her position if was persuaded that the treatment would be effective.

Mrs X's gait favoured the painful left side (she tended to be very cautious in making any movement) and her movement in standing flexion, was restricted to less than 30 degrees with a tendency to side bend to the left.

On palpation and further examination, the following was evident:

- Segments of her lower lumbar vertebrae (particularly L4 and L5) were distorted relative to the rest of the spine;
- The pelvis and sacrum were also distorted about the sacro-iliac joints in a Combination of antero- posterior and vertical rotations.
(NOTE: In simple visual terms, if one can imagine the normal spine as a vertical rod with the two pelvic bones lying on either side with the pelvic crests parrell to the ground; in Mrs X's case, the spine appeared to be "kinked" about one third of the way up from the bottom, and the pelvis was tilted forward on one side and

backward on the other. In addition, the bottom of the spine (i.e. the sacrum) was lying right top corner down and forward with the whole of the sacrum rotated anti-clockwise.)

- There was tenderness to the (R) quadratus lumborum (QL) and to the psoas on the left. The hamstring muscles on the left leg showed general tightness with Range of movement restricted to 35 degrees in bending from the hip with a straight leg (supine). There was full ROM to the other leg with no pain.
- There was a marked lateral movement of the spine to the right between thoracic vertebrae 8, 9, 10 and 11 (not uncommon in cases where there is pelvic distortion).
Caution: In the knowledge that there were two intervertebral discs affected by prolapse, it was important to be sure that there were no contra-indications to manipulative or remedial massage therapy. A series of tests both structural and neurological were undertaken before proceeding.

Treatment:

I suggested that in treating chronic back pain, there was no easy or quick solution. Over a fairly lengthy period, she would have to examine every aspect of her lifestyle and make adjustments where necessary.

Following discussion, it was agreed that treatment would consist of:

- Manipulative therapy to correct the structural distortions to the pelvic girdle and sacrum, the lesions to L4 and L5 together with the thoracic scoliosis and associated cervical compensations;
- Remedial massage therapy (in particular myofascial release) to relieve muscle spasm (note: there was acute pain to the lumbar fascia on the right side bearing out the tenderness to the QL muscle on that side);
- Contract relax techniques to improve relaxation of the muscles found to be in spasm (BUT, always within the pain threshold);
- Exercises to improve the range of movement and strength of the erector spinae and intrinsic muscles of the spine, abdominal muscles, psoas, quadriceps and hamstrings. In the first instance, because of the level of pain and restricted movement, Mrs X started with a series of isometric exercises (non load-bearing) to improve the basic strength of the various muscle groups over a short period.

Gradually, the range of movement, strength and stretching exercises were introduced. (NOTE: the myelogram had indicated that the prolapse of the discs was towards the posterior oblique part of the vertebrae. Strengthening and mobilisation of the spinal muscles therefore concentrated on movements, which emphasised normalisation of the lumbar curve). It was also essential to ensure that the pelvic girdle would remain stable following manipulation. It was important therefore to emphasise and progress to exercises involving all the main muscles above and below the pelvic girdle which contribute to such stability. The progressive patterns described were expected to be done on a daily basis. In the beginning, the isometric exercises were to be completed at least twice a day;

Mrs X agreed to look at all aspects of her daily life, to ensure that she was not undertaking movements, which would exacerbate the chronic back pain. In doing so, we looked at:

1. Basic posture.
2. Movement (i.e. standing, sitting, lying) .
3. The kind of shoes she should avoid wearing (e.g. high heels).
4. Her work environment. In particular, the ergonomic set up of her computer and sitting arrangements. (Note: Mrs X agreed that she was often under stress at work to deliver projects on time, and she would discuss ways of working with her colleagues).
5. In the home environment, we discussed ways of that she could play a full part in family life without aggravating her condition. (E.g. playing with the children in positions of acquired comfort; changing the way her horse was cared for).

Progress:

Within 2 treatments, the pelvic girdle had stabilised and Mrs X had increased the number and intensity of the prescribed exercises. At the same time, there was a significant reduction in pain with a resultant increase in forward flexion of about 40 percent;

Even after a few treatments, Mrs X's mental attitude had changed considerably. She was:

1. Much more positive about the future;
2. Could now see a future without the need for surgery;
3. Excited about how much she could do within a relatively short space of time;
4. Positive about the possible long-term relief from pain;
5. Able to walk, stand and sit normally with only a minimum of discomfort when lying in bed on odd occasions.

After 11 treatments Mrs X experienced no back pain, and had regained 80 per cent of full range movement to the hamstrings in the left leg. By the end of the summer, there was no significant difference in ROM to both legs. Forward flexion was within the normal range with no side bending. Mrs X was also pain free.

On revisiting her orthopaedic surgeon in November 2000, he was satisfied that no further MRI scan was required and was delighted to witness the degree of normality to her lifestyle.

Remarks:

The most pleasing aspects of this case have been:

1. The change in attitude of Mrs X. She is once again a vibrant young mother;
2. She has returned to horse riding and is considering a return to Dressage competition; (even here, she has analysed how this must be approached with a strong influence on proper riding technique);
3. The need for a whole person approach in treating such conditions. I believe any success attributable here, is due to the hard work done by the patient along with her determination to make changes to her lifestyle;
4. My job apart from the manipulative/massage/ exercise therapy was to set up a situation whereby the patient could take command of her own body, thought process and her home and work environment. I consider it a privilege to have worked with this resolute and determined young mother.

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