CASE STUDY

Nº 4

Name:	Gerard M. Thyne M.B.S., M.B. ChB., F.R.A.C.D.S., O.M.S.
Age:	37
Occupation:	Oral Maxio Facial Surgeon
Location:	Wellington, New Zealand

Symptoms

Dr Thyne has had back problems, with sciatic pain, which eventually resulted in restrictions to his lifestyle:

Going on holidays, by the time I had packed the car I could not pick up and hold my children.

Dr Thyne knew that he had to consider his situation as serious, so he undertook a program of exercise and physiotherapy which, along with his engagement in his sport of rowing, have become part of his regime for managing his symptoms. Another part of the scheme is the Bambach Saddle Seat. He had been told about the Bambach Saddle Seat by a fellow surgeon who had seen it while attending a conference in Cairns, Australia and had subsequently bought one for his surgery. Dr Thyne decided to try the Bambach Saddle Seat himself.

Introduction to the Bambach Saddle Seat

Dr Thyne was instructed how to adjust the seat height and tilt to find the best posture for work. He made adjustments frequently as he became used to the new position.

He subsequently moved to a more spacious surgery, and now he also has a patient's chair that can be raised to a height optimal for use in conjunction with the Bambach Saddle Seat. He has the space to move more easily around his patients and is able to get closer to the work. Dr Thyne uses a loupe for his work, which requires great stability and static 'hold' position. His seat is a standard model, with foot-operated height adjuster.

Result

Dr Thyne experienced a marked improvement in symptoms as a result of a regime of exercise, lifestyle changes and a heightened consciousness of good bio-mechanics of which the Bambach Saddle Seat is a part.

The Saddle Seat is good for my posture when operating and for my general postural awareness. As it is not an ordinary seat, it reminds you to be aware of your posture.

Before using the Bambach Saddle Seat, Dr Thyne did all of his surgery standing; Now he remains seated 30% of the time. He has been using the Bambach Saddle Seat for 18 months.

Dr Thyne on his conventional dentist's stool. Note strain on the back to hold a functional position. His shoulders are hunched, his head flexed and his elbows working in flexion with hand 'cocked' – the classical position for CST or RSI.

Dr Thyne on conventional dentistís stool. Note hunched position of shoulders and the outline of his back in a 'C' shape.

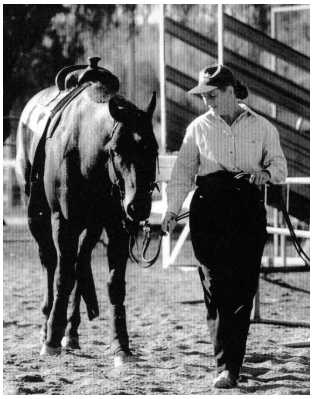
Dr Thyne on a Bambach Saddle Seat. Note his head and neck are restored to a natural position, his shoulders now relaxed, allowing his elbow and hand to work in mid range. His posture is less strained all over.

On a Bambach Saddle Seat Dr Thyne's shoulders are now relaxed, his lumbar curve restored, his head position improved with greater access to his client's head from above (and his hands have easier access).

Continued from overleaf

Dr Thyne sees one of the main benefits of the Bambach Saddle Seat as a tool that consciously reminds him to assume and maintain good posture. He believes that the Bambach Saddle Seat is a key part of the attitude change necessary to maintain good spinal health as well as being a seat that actually works to improve posture.

The Award-winning Bambach Saddle Seat



Mary Gale

The idea for the Bambach Saddle Seat came to occupational therapist and horsewoman Mary Gale in treating patients who could not sit unsupported on an ordinary seat or wheelchair. Mary found that the same patients could balance quite independently on horseback and assume a symmetrical posture.

It occurred to Mary that if she could replicate the 'saddle position', where the spine is able to assume its natural curves, she would create an ideal seat for therapy as well as for task seating.

A review of literature showed work of Dr A.C. Mandel, who noted that the ideal sitting posture for the human spine is achieved on horseback. Other researchers also concluded that ordinary furniture removes the natural curves from the spine and places great stress on the spinal discs. Anecdotal reports from horse riders who suffered severe back pain on the ground, yet who gained marked relief when mounted in the saddle, were also noted.

Several years of experimentation resulted in the Bambach Saddle Seat, deceptively simple in design but incorporating refinements and features that permit sitting for extended periods without loss of a healthy spinal curve. The proof is that the Bambach Saddle Seat is enabling many people who suffer disabling back pain to return to work. The seat also offers the opportunity for normal adults and children to sit to work independently in correct posture and maintaining mobility, but it is especially valuable for many who are physically impaired.

NeoCon Silver Award Design Excellence for Desk/Workstation Task Chairs

Winner ADEX Award for Ergonomic Task Seating

Published papers on the Bambach Saddle Seat

T. Verkindere, C. Lacombe, and J. P. Lodter, 'Electromyographic study of the dynamic sitting position suitable for dentists', *L'information Dentaire*, Vol. 80 No. 12 (March 1998)

M. Gale, S. Feather, S, Jensen. G. Coster., 'A Multi Disciplinary Approach to the Design of a Work Seat to Preserve Lumbar Lordosis'. Australian Occupational Therapy Journal, Vol. 36 No. 2 (June 1989)

Publication

Mary Gale, *The Seated Spine & The Bambach Saddle Seat*, Brookvale, NSW, 1997.

Research papers on the Bambach Saddle Seat have been presented at:

International Conference on Ergonomics Occupational Safety & Health & the Environment, Beijing, October 1988.

Third International Physiotherapy Congress, Hong Kong June, 1990.

The National Safety Council of Australia's Congress, `Futuresafe', Adelaide, South Australia, May 1992.

'Tadsem', Cumberland College of Health Sciences, University of Sydney Campus, Australia, October 1992.

World Federation of Occupational Therapists Conference – The Scientific Programme Technology Seating Sessions, Imperial College, London, April 1994.

Research on the Bambach Saddle Seat has been exhibited via poster presentation at:

The World Federation of Occupational Therapists, Melbourne, Victoria, Australia, April 1990.

World Physiotherapy Congress, London, UK, September, 1990.

Unpublished papers on the Bambach Saddle Seat

A. Nicholls, Doctor of Chiropractic: 'Report; Physiological Evaluation of the Intact Column-Pelvis-Meningeal System Radiographic Outcome Findings'.

Prof. G. Schumpe, Graduate Physicist/Medical Practitioner: Biomechanical Study of Sitting on the 'Saddle Seat'.

M. Gale, S. Aldrich, S. Jensen, W. Gale, 'Comparison Study of a Saddle Seat with Conventional Office Work Seat'.

THE BAMBACH SADDLE SEAT™

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