

Brugger's "Sterno-Symphyseal" Syndrome

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The first step in treatment for musculoskeletal pain is advice. This precedes both manipulation and exercise. A very common postural syndrome in modern society involves excessive lumbar and thoracic kyphosis, a forward drawn head, and hyperlordosis of the cervicocranial junction. This is a natural result of prolonged sitting work, especially with computers. This posture is associated with increased muscular tension and faulty respiration habits.

When the slumped posture is assumed for sustained periods of time, increased load is placed on the intervertebral disc. On examination, certain muscles are predictably found to have increased tension:

- upper fixators of the shoulder girdle
- pectorals
- upper extremity flexors
- abdominals
- hip flexors
- adductors
- posterior calf muscles

This muscle tension is reversible by merely having the patient sit up straight.

With the sternum approximating the pubic symphysis, diaphragmatic inhibition results in overactivation of scalene and upper trapezius musculature during respiration. Inspection reveals excessive shoulder girdle elevation during inhalation. The slumped posture should thus be considered a key perpetuating factor of faulty respiration, and of myofascial syndromes involving the upper trapezius or scalene muscles.

Brugger's advice to individuals who work for long hours in a constrained, slumped posture is to learn to sit upright, or use supports which help maintain the lumbar lordosis. Repetitive "micro-breaks" every 20 minutes are a sensible approach. A "relief position" has been advocated incorporating the following components:

- Sit at the edge of a chair.
- Abduct legs slightly.
- Externally rotate legs slightly.
- Rest weight on legs/feet & relax abdominal muscles.
- Tilt pelvis forward & lift sternum up thus increase lumbar lordosis to its maximum.
- Supinate forearms.
- Externally rotate arms.

With the patient in the "Brugger relief position" previous areas of palpable tenderness should be palpated again. They should be found to be much softer and less tender.

This postural advice can be recommended for 10 seconds every 20 minutes. It can be incorporated

into sit to stand, walking, and lifting advice. Within a few weeks, patients usually experience the sensation of sitting and standing straighter naturally. When this occurs, conscious effort is not as necessary because a new skill has been learned on an automatic basis. This is ideal as long-term compliance with exercise is difficult to achieve, but a new postural habit once learned is unlikely to be broken.

References

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OCTOBER 1997