

seating

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Take a seat - it might even be comfortable!

It is now recognised that prolonged sitting can give rise to back problems, just as serious as those traditionally associated with activities such as heavy lifting. Good seating is vital if our increasingly sedentary workforce is to find comfort.

When specifying office furniture, it is wise to follow the ergonomic guidelines given in the international standard BS EN ISO 9241-5 *Ergonomic requirements for office work with visual display terminals (VDTs): Workstation layout and postural requirements*. This includes advice on how to achieve a good fit between worker and task by considering equipment, task requirements, anthropometric data and behavioural patterns. Using such a standard may help to avoid developing a back problem, but what about those who already suffer with a back complaint? The recommended good practice for setting up office workstations may not be suitable. In these cases, we need to ensure that a more individual approach to assessment is taken and certain designs of seating have been found to help.

Having assessed over 2000 clients with a diagnosable musculoskeletal injury, many of which had some form of back problem, I have found that for a majority of clients,



An 'RH' chair

discomfort could be reduced by supplying a chair that fits the description detailed in ISO 9241-5.

A basic chair for people with

prolapsed discs, lumbago, nondescript lumbar, thoracic and cervical pain or discomfort would be an RH chair or Opera chair. Both offer dynamic sitting while being supported and importantly, come in a range of different seat back and seat pan sizes, gas stem heights, fabric and neck rest options. Many users that have undergone back surgery report the RH type chair with a solid back and lumbar support gives adequate support and experience no discomfort. If the user also suffers from sciatica, arthritis in the knees or



ankles, or deep vein thrombosis, a rocking footrest, such as those manufactured by HÅG, can improve the circulation between lower back and lower limbs and has been found to be very effective. They stretch the calf muscles and give the soles of the feet a comfortable massage.

For users with constant back stiffness in the lumbar region and for those that report restricted spinal movements, a 'backcycler' device inserted into the back of a suitable chair is very effective. The 'backcycler' works by gently inflating and deflating every minute, which gently flexes the lumbar region. This helps to restore mobility by relaxing muscles and moving the discs away from the root nerves and so reduces pain. All users using this mechanism report greater freedom of movement in the lower back.

Users that have suffered from injury to the coccyx or have had it removed, find that a coccyx cut-out on the seat pan is an effective solution. The cut-out reduces the painful region in contact with the seat. Seat pans can also be split for clients who have pelvic or lower limb conditions where one leg is required to stretch out while the other remains in a normal sitting posture. They can also be fitted with self-moulding foam to reduce pressure to the buttocks and surrounding areas

and help reduce radiating pain. If users have tender areas of their spine, a split back chair can be effective, which prevents the spine coming into contact with the chair.



Whiplash can result in upper back, neck and upper limb pain and discomfort. If the user describes this type of pain then a suitable chair is the 'Hoganasmobler'. This chair is fitted with an effective raised triangle pad that fits between the shoulder blades. Many users report that the extra support gives quick but sustained



relief. A neckrest has been found to be beneficial to users with whiplash too. Mobile armrests that cup the forearms and give

support to the upper limbs while performing tasks are effective and worth considering for certain users reporting pain and discomfort.

For clients with scoliosis (abnormal lateral bending of the spine), it is recommended that a chair back be purpose-built to support the curvature of the spine in order to reduce pain and discomfort. A standard lumbar support has not been found to be beneficial due to the irregular shape of the lumbar curve.

It must be remembered that a chair is often only part of the solution and therefore a bespoke assessment that details the medical history is essential. A 'bodymap' with the client scoring pain is very helpful. It is essential the user is trained to use the chair and knows how and when to make adjustments, and that the seat is provided with complete instructions.

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