**Complex Ergonomic Workstation Assessment**

**Sector - Office**

A complex ergonomic workstation assessment is designed for employees who have completed their Display Screen Equipment (DSE Assessment) and have reported discomfort which requires expert advice.

A chartered ergonomist will complete a detailed analysis of the user's environment, tasks and workstation to establish if any aspects from the environment may be causing or exacerbating the users reported discomfort.

The ergonomist will spend one hour onsite which involves an informal interview, observation of user working within their environment and a summary of the initial findings.

A detailed ergonomic workstation report will be produced which provides recommendations for change to aspects such as posture, working practices and potentially equipment if required.

The goals of the report are to improve the safety, comfort and productivity of the user.

**Benefits**

- Reduction in presenteeism and absenteeism.
- Improved wellbeing and productivity.
- Clear recommendations to improve comfort.

**Background**

A Morgan Maxell client requested a complex ergonomic workstation assessment for an employee who had been diagnosed with a herniated disc within the lower back, shoulder, neck and arm pain while working with their computer.

The ergonomist met with the client to get a detailed understanding of their workstation and the environment. A private informal interview allowed the ergonomist to understand any specific issues from the environment which may be causing or exacerbating the reported discomfort. Observations of the client undertaking their typical work tasks, as well as photographs and anthropometric measurements were taken with client permission.

The complex ergonomic workstation assessment found the following areas of the user’s workstation and environment to be causing problems.

**Results**

- Reduction in reported discomfort
- Reduction in absenteeism and presenteeism
1. Referring to documents which were positioned flat on the desk. This task was shown to be causing the client to adopt non neutral spinal postures.

2. Standard keyboard with integrated number pad caused the client to have to reach (abduction) for their mouse causing discomfort within the shoulder and neck.

3. Monitors positioned too far away from client causing non neutral spinal postures when viewing.

4. Sitting too low which caused non neutral upper limb postures during typing and mouse use.

5. Long periods of sitting due to the nature of the tasks. Sitting has been shown to increase the loading within the intervertebral discs.

Recommendations

The following recommendations were made to improve comfort and productivity.

✓ An inline document holder which positioned documents that were flat on the desk in between the monitor and keyboard. Positioning the document holder between the monitor and keyboard reduced the need for the client to adopt repetitive and static non neutral spinal postures. The client was able to adopt a more comfortable posture when referring to hard copy while allowing an increase in productivity.

✓ A keyboard without integrated number pad was supplied allowing the client to use their mouse closer to their body.

✓ The ergonomist ran through the setup of their current chair and explained the benefits of fitting the task to them once they are in a comfortable sitting position. The monitors were positioned at arm's length away from their body while being supported by their chairs back support.

✓ The client was positioned at the correct sitting height to reduce the loading on their upper limbs while working with their computer.

✓ Advice was provided around the benefits of movement and standing from sitting on the lower back and from a health perspective. A sit stand desk was recommended to reduce the loading within the intervertebral discs by having the ability to stand and work.

The company implemented the recommendations at a cost of £425 in equipment. After 8 weeks of working with the new set up the client reported a reduction in discomfort within the lower back, shoulder, neck and arm and a reduction in time of work.