Handling safety for patients with inflammatory arthritis

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Moving and handling in the healthcare setting is heavily focused on the safety of healthcare workers and the importance of ensuring training in techniques is up to date. However, careful risk assessment should focus on reduction of injury to patients as much as to healthcare workers. Patients with inflammatory arthritis can be particularly challenging due to the condition and its symptoms.

Patients in all clinical settings may present with complications when it comes to moving and handling needs. However, the main focus of education/training in moving and handling tends to be solely based on the needs of the healthcare worker, rather than the individual patient or patient group. Patients with inflammatory arthritis are often dependent on the skills of the healthcare worker to ensure they are handled correctly.

Rheumatoid arthritis (RA) is the most common form of inflammatory arthritis and affects approximately 387,000 people in the UK (Arthritis Research Campaign, 2002). It is an autoimmune condition characterised by joint inflammation, giving rise to pain, swelling, heat and stiffness. RA is a chronic systemic condition that is progressive. However, severity and prognosis may be difficult to predict. The cause is unknown and there is no cure. Current medications aim to control the progression of the condition, reduce the symptoms and maintain the individual’s function and independence (Arthritis and Musculoskeletal Alliance, 2004).

An exacerbation of the symptoms or ‘flare-up’ may be preceded by infection, or psychological or physical stress. Flare-ups are unpredictable and often there is no known cause. During a flare-up it is not unusual to feel generally unwell with one or more joints producing excruciating pain. There is evidence to suggest that uncontrolled inflammation leads to joint damage that may result in the need for surgery (Korpela et al, 2004).

Mobility

RA primarily affects synovial joints such as shoulders, wrists, knees and ankles, and joints in the hands and feet (Fig 1). However, it is a systemic condition and can involve other organs, for example:

- Kidneys (amyloidosis);
- Muscles (wasting);
- Lungs (fibrosis);
- Bone marrow (anaemia thrombocytosis);
- Pericardium (splenomegaly).

Pain, swelling and stiffness of any joints can contribute to a reduction in an individual’s ability to remain mobile. If there is acute inflammation, joint protection measures should be implemented. These include redistributing any weight being carried and avoiding pressure through the joint where possible. An example of this is avoiding pushing up through hands and wrists when rising from a chair. Where joint destruction exists, the range of movement may be greatly limited. Mechanical damage of the hand or wrist may prevent the use of a walking aid and damage of the hip may impede walking.

Caring for a person with RA who is in bed involves careful consideration when assisting with positioning their limbs. Supporting the affected joint may help to limit the pain they experience. Observation of skin integrity is paramount as it may be affected by:

- Steroid therapy;
- Vasculitic lesions;
- Anaemia of chronic disease;

Safe handling

Manual handling is defined as the transporting or supporting of any load by hand or bodily force (Manual Handling Operations Regulations, 1992). This includes lifting, pushing, pulling, putting down,
carrying and moving. In the healthcare setting, major emphasis has been placed on prevention of lifting in order to decrease the number of handling-related accidents. Every year 80,000 nurses develop a back injury and 5% have to retire as a result (Secome and Ball, 1992). Back pain also accounts for 16% of sickness time taken by nurses each year (Phesant, 1991). Back injuries alone cost the NHS an estimated £400m a year in sickness and absence (Paton, 2005).

In view of this, moving and handling has a high priority in all care settings and has become a mandatory skill for nurse training and for healthcare workers in all trusts. The widespread use of slide sheets, transfer boards and hoists has shown that trusts are providing equipment to aid nurses in the many handling tasks required in nursing a patient.

The Health and Safety at Work Act 1974 states that one of the duties of the employee in the workplace is to: ‘Take reasonable care of their own health and safety and those who may be affected by their acts and omissions.’ Although the Health and Safety at Work Act 1974 was useful, this particular statement was not translated to more specific acts such as the Management of Health and Safety of Work Regulations 1999 or the Manual Handling Operations Regulations 1992 (updated 2002). These emphasise that employees should take care to ensure that their activities do not put others at risk, yet the duties and responsibilities of the employee simply focus on the need to attend a moving and handling course annually and make proper use of any equipment and systems provided.

### The need for risk assessment

Risk assessment in moving and handling is the process of identifying the hazards and weighing up the risks to make the working environment safer for employees and patients. Risk assessment is a holistic process with several interrelating aspects. TILE is an acronym for a simple checklist for identifying risk:

- **Task**;
- **Individual**;
- **Load**;
- **Environment**.

Although TILE is a good way of considering safety in the need to move or handle a patient, it shows little understanding of the needs of individual patients. This is mainly due to the patient being described as a load. Although more recent uses of TILE have added the word equipment to extend the acronym to TILEE, there is still too little emphasis put on the individual. As a load could simply be a box that would need to be assessed for weight and size, it is essential that nurses individualise any risk assessment for a patient and their condition.

An example for a patient with inflammatory arthritis might be:

- What is the patient’s clinical diagnosis?
- What help does the patient need?
- Can the patient bear weight?
- Is the patient affected by pain/medication?
- Does the patient have the ability to communicate?
- Are there any tissue viability concerns?
- What is the height and weight of the patient?
- Is there a history of falls?
- What are the patient’s comfort issues?
- What is the predictability/unpredictability of the patient and her/his condition.

It is important that healthcare workers assessing patients with inflammatory arthritis gather enough information to meet the needs of the individual’s...

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**FIG 1. COMMON DISTRIBUTION OF SYNOVIAL JOINT INVOLVEMENT IN RHEUMATOID ARTHRITIS**

<table>
<thead>
<tr>
<th>Shoulder</th>
<th>Wrist</th>
<th>Knuckle and Middle Joints of Fingers</th>
<th>Knee</th>
<th>Ankle</th>
<th>Middle Joints of Toes</th>
<th>Ball of Foot</th>
</tr>
</thead>
</table>

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**REFERENCES**


This article has been double-blind peer-reviewed.

For related articles on this subject and links to relevant websites see www.nursingtimes.net
condition. It has been widely acknowledged that manual handling risk assessments should be carried out on patients who cannot move independently (Wright, 2005; Health and Safety Executive, 2004). If the reason for the lack of independent movement were made specific, for example because of a clinical condition, then specific moving and handling strategies could be devised.

**Joint protection**
As patients with inflammatory conditions are susceptible to pain and sensitivity around their joints, it is important to use indirect holds. Any contact with the patient should be with as much of the palms as possible, preventing grip-like holds. Points of contact with the patient should be ‘indirect’ as opposed to ‘direct’ (Table 1) as this aids joint protection. An example would be to glide your arm underneath the patient’s joint (indirect) rather than painfully gripping the joint (direct).

**Case study**
Jane Smith (not her real name), a 55-year-old woman with long-standing RA, was admitted with a septic arthritis of her right knee. The underlying infection had caused an exacerbation of her RA. Treatment involves 48 hours of bedrest and IV antibiotic therapy. While feeling generally unwell, Ms Smith also had pain, swelling and tenderness in both wrists and shoulders requiring assistance from nurses to help maintain mobility and independence.

**Risk assessment**
- **Task**: To assist Ms Smith in all activities of daily living as she was very dependent due to a flare-up of her RA.
- **Individual**: Staff need to work in pairs and to use equipment as Ms Smith’s capability at the time of assessment was very limited. Ms Smith is unable to perform weight-bearing activities due to a septic right knee. The subsequent flare-up means that she cannot support her weight to transfer due to the tenderness of her wrists and shoulders.
- **Load**: Ms Smith has good muscular capability and is usually independent. She weighs 65kg and due to her current dependence will require the use of moving and handling equipment to aid her mobility with the carer (see equipment, below).
- **Environment**: Ms Smith will be requiring assistance while on the bed, as well as transferring between bed and chair. Assistance will also be required in the bathroom to help when maintaining personal hygiene and using the toilet.
- **Equipment**: Ms Smith will need guidance and reassurance before using equipment and lifting aids. It is essential to explain to Ms Smith how the equipment works and what her role is in its use. Slide sheets will be required for all her changes of position while on the bed. A handling sling is required to assist Ms Smith to sit up while in bed, while all other transfers will require a hoist with the appropriate sized sling.

**Conclusion**
Moving and handling plays a major role in all healthcare settings and the need for training and regular updates is crucial to prevent injury and maintain a healthy workforce.

It is vital that we consider the patient and her or his condition as more than just a load. Patients with RA are just one example of those who rely on their carers to help with mobilisation. The key to successful moving and handling with such patients is dependent on an individual risk assessment that focuses not only on safety for the carer but also for the patient.

The use of simple assessment tools such as TILEE and an understanding of joint-protective techniques can help in assessing difficulties of a procedure and also the clinical condition.

<table>
<thead>
<tr>
<th>DIRECT HOLDS</th>
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<tbody>
<tr>
<td>Holding above instead of supporting underneath</td>
</tr>
<tr>
<td>Can be uncomfortable for the patient</td>
</tr>
<tr>
<td>Inhibitory to movement</td>
</tr>
<tr>
<td>A small contact area causing high pressure</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>INDIRECT HOLDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holding from behind or below</td>
</tr>
<tr>
<td>More comfortable</td>
</tr>
<tr>
<td>Can be a larger contact area</td>
</tr>
<tr>
<td>Use of friction from palms and body surfaces</td>
</tr>
</tbody>
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**REFERENCES**
