ORTHOSPORTS

QUESTION FOR PHYSIOTHERAPISTS

QUESTION | IN A CONVENTIONAL CONTROLLED ENVIRONMENT SUCH AS A HOSPITAL OR WELL-RESOURCED CLINIC, RELOCATING A DISLOCATED JOINT AFTER APPROPRIATE PAIN MANAGEMENT AND INVESTIGATION IS SEEN AS NECESSARY AND GOOD PRACTICE. ON FIELD MANAGEMENT IS WELL DOCUMENTED IN EMERGENCY SITUATIONS, HOWEVER, CLINICAL GUIDELINES FOR ON FIELD MANAGEMENT ARE NOT WELL DOCUMENTED.

HOW DO YOU SEE THE SCOPE OF PRACTICE FOR PHYSIOTHERAPISTS ATTEMPTING JOINT RELOCATIONS ON THE SPORTING FIELD? WHAT LIMITATIONS ARE THERE FOR MEDICAL PRACTITIONERS, (EVEN ORTHOPAEDIC SPECIALISTS) IN DIFFICULT DISLOCATIONS SUCH AS A HIP DISLOCATION.

ANSWER | Joint dislocation is a common problem in contact sport. A doctor is not always available, especially at a community level, and sometimes a physiotherapist will be the most experienced practitioner available.

There is no doubt that joint dislocation is painful. In almost all cases reduction of the dislocated joint will provide immediate pain relief. If there are concerns about neurovascular or skin compromise, then it is again reasonable to consider an immediate attempt at reduction.

When and where to a dislocated joint is an interesting question and really depends on several factors. Including:

- the joint affected,
- the type of dislocation,
- the experience & knowledge of the person available and how to relocate the joint.

Whilst it is true that in a hospital setting a patient may often get pre relocation X-rays, this whole process takes time and it may simply be better to try and get the joint back in place where possible. Whilst there may be medicolegal issues in the context of the hospital setting as to whether a fracture occurred before or subsequent to the relocation, most patients will be happy to have the joint put back in place where possible. A post relocation X-ray is always required to confirm correct joint position and to exclude a fracture, no matter what the joint.

Analgesia is an important adjunct in joint reduction, especially large joints like the shoulder or elbow. The best method is to inhale methoxyflurane (Penthrox or the 'green whistle'). This provides almost immediate pain relief and relaxation, can be administered by anyone with first aid experience, is controlled by the patient and is very short acting so hard to run into problems. It is best to avoid oral analgesia in case there is a requirement for an anaesthetic.

An attempt should generally be made to reduce finger joint dislocations as they are small joints, relatively easy to get back into place and there are few consequences of a failed reduction. It is important not to confuse a dislocation with a fracture as an attempted relocation is both painful and pointless *(a lesson I learned from a patient perspective as a trainer repeatedly pulled on my fractured proximal phalanx to' get it back in').* Post reduction

films are essential in PIP and DIP dislocations as congruity of the small joints in the hand is essential and can lead to significant disability if unrecognised.

Patella dislocations will often spontaneously relocate and will do so in positions of knee extension. If it does not, then the knee should be gently extended with a medial force to the patella and relocation should typically occur.

The other joints to consider are the shoulder, less commonly the elbow and rarely the hip. The decision to relocate these in the field will again come down to the experience of the physiotherapist and how comfortable they are to perform the reduction procedure. Not being comfortable with the correct technique (and there are a few described for the shoulder) can cause patient more pain and potentially cause complications. It is out of the scope of this article to go through specific relocation techniques, but there are many videos of the different methods available on the internet that can be viewed for reduction of shoulder, elbow and hip joint dislocations.

It should be noted that joint reduction in the field is not always possible, even for experienced medical practitioners. Sometimes there is just too much muscle spasm, or even intra-articular issues that prevent relocation. In these cases, a closed reduction may need to be performed with more substantial medication, a nerve root block or even under general anaesthesia.

In summary, it is quite reasonable to consider relocation of a dislocated joint in the field. The decision to do this relates to the type of dislocation and the comfort and experience of the practitioner available. Whilst complications don’t generally occur, if the procedure is difficult or the practitioner not confident in the appropriate method, then definitive reduction should occur in a hospital setting.

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