

# MSK INJECTION THERAPY



# AIMS and Objectives

- Brief overview of Injection therapy, assessment tips and advice
- Small group work in 3 rotating groups.
- Use models and GLOVES (please take a pair round with you) to **practice** injection techniques
- Shoulder, Elbow, Wrist, Hand, Knee and Hip
- Discuss foot techniques (no model unless any volunteers!)

# This is interactive

- **Please ask questions** of the MATS clinicians who will endeavour to answer , or direct you.
- We have a variety of Injection Books
- (You can see techniques on U Tube!)
- There are some handouts with joint specific advice and options including Criteria Based Access and Prior approval policies INNF (CCG) <https://www.bristolccg.nhs.uk/innf>.

# Introduction

- Chartered Physiotherapists have been administering corticosteroid injections in the course of their practice since 1995 when the Chartered Society of Physiotherapy (CSP) recognised this as within the scope of physiotherapy practice.

- Corticosteroids have been in use in musculoskeletal disease management since their introduction in the 1950s by J. Hollander
- Injection is occasionally used as a solitary therapy, it is rarely the first line approach and most commonly used as an adjunct to drug management or Physiotherapy intervention.

# Use

- **Therapeutic** for pain relief and to deliver pharmacologic agents
- **Diagnostic** to analyse fluid obtained with the safety aspiration or arthrocentesis
- and for **differential diagnoses** to rule out or demonstrate if pain is local somatic or referred pain.

# Types

# Steroid

- **Corticosteroid** agents differ in their **effects and duration** according to potency, solubility and crystalline structure.
- The **potency** of synthetic corticosteroids is measured as a ratio against hydrocortisone acetate at 1; therefore Depo-Medrone and Kenalog have a relative potency of 5.
- The **duration** of effect: the less soluble the preparation, the longer the effect .

MATS use Depo-Medrone and Kenalog

# Types Local Anaesthetic

- The **duration and toxicity** of **Local Anaesthetic** solution used:
- either **short- or long- acting** ,
- with **concentrations** from 0. 25% to 2% ,
- **onset** of effect from 1 – 2 minutes to 30 minutes
- and a **duration** of effect from ~ 1 hour to ~ 8 hours.

MATS use **Lidocaine** 1% and 2% and Depo-Medrone with Lidocaine MIX (premix)



- **Pain relief** is documented with a duration of 1 – 3 weeks,
- but the literature suggests that corticosteroids have some beneficial effect after this time.

- After 8 weeks no difference is reported.

**The effects therefore are short term and temporary.**

**But may allow restoration of more normal function.**

# Adverse Effects and Cautions

Anaphylaxis: at its most serious can prove Fatal

- diabetics
- Sepsis
- Tendon rupture (don't inject into)
- Steroid flare.
- Altered menstrual cycles (females!)
- Facial flushing in 5 % of interventions (boys too!)
- Skin de-pigmentation fat atrophy

# Safety

- “absolute” and “relative” contraindications in the literature:

infection, allergy, drugs, pregnancy

- Documented **informed consent**
- Duration of “relative rest” post injection
- and the issuing of a patient advice leaflet along with verbal advice.
- It is advisable for the client to wait in reception for a minimum period of 30 minutes after the injection to rule out the risk of anaphylaxis, allergy or less serious side effects.

## Frequency. According to the literature

- An injection may be repeated.
- the risk of tissue dehiscence dictates a maximum of three injections into any one structure (two- MATS) within a 12 month period, especially if wt bearing joint
- with a minimum of 4 – 6 weeks between injections at the same site

# Conclusion

- corticosteroid injection therapy is a means to deliver a pharmacologic substance which will provide at best a short term analgesic effect lasting 2-6 weeks
- is one of the most common interventions for MSK soft tissue and intra-articular lesions.

# Competence

All AHPs have to pass either a recognised specialist MSK course, SOM, or a Masters module specific to MSK injection therapy, and produce a CPD portfolio with regular observation in practice each year.

- The CSP ACPOM guidelines (ACPOM 2001) are an attempt to rationalise and institute the best available evidence and practice, to ensure that all physiotherapy practitioners follow the same principles and that there is little scope for dangerous practices as the profession is still new to the techniques and litigation is swift in the face of an incident.



NOW Lets go and play.....!

