



## **Hydrodilatation for frozen shoulder**

I've listed you today for a procedure called hydrodilatation to treat frozen shoulder. Please find below some information about the expected outcome and possible problems for your information:

**What is hydrodilatation:** The procedure was first published in 1965 but has seen a recent resurgence. The idea is to stretch out the stiff shoulder by filling up the shoulder with fluid under pressure – a bit like filling up a balloon with air.

**What's going to happen in theatre?** You will be awake during the procedure and you will sit on the theatre table. Patients under sedation will lie on their back. The x-ray machine will be positioned next to your shoulder. I will inject a bit of local anaesthetic into the back of the shoulder to anaesthetise the skin and joint capsule. I will then place a needle inside the shoulder joint and confirm correct positioning with x-ray. Next I will fill up your shoulder with local anaesthetic and Cortisone. This should help to keep you comfortable. Once the local anaesthetic works I will inject fluid into your shoulder, gradually increasing the pressure. This is to stretch out the stiff shoulder capsule. The whole procedure only takes a few minutes.

**What is in the injection?** I'm using a long-acting local anaesthetic to take the pain away during the procedure and in the hours after. The other ingredient is Cortisone (also known as the steroids). This is a strong anti-inflammatory that will help to reduce pain in your shoulder in the weeks after the procedure.

**Is it going to be painful?** There will be some discomfort from inserting the needle into the shoulder and injecting the local anaesthetic. While most patients tolerate the procedure very well, some people feel uncomfortable or may feel a bit faint. You may experience some pain in the days after the hydrodilatation, but normal painkillers will be sufficient to deal with that.

**Possible side effects:** The steroids come in a crystal suspension that dissolves slowly and only a small amount will go into the blood stream. Systemic side effects are very unlikely, unless you are diabetic. If you are diabetic your blood sugar levels are likely to be higher than usual for about a week following the injection. I recommend you check your sugar levels more often and you may have to adjust your insulin dose accordingly. If the Steroids are injected too close to the skin they could cause permanent skin thinning and/or discoloration.

**Infection:** This is a very rare complication following the injection. If you notice increasing redness, swelling and pain 3-10 days following the injection you should seek advice from me, your GP or a Doctor in A&E.

**Damage to nerves or vessels:** This would be extremely rare

**Pain flare:** Some patients experience more pain for 1-3 days following the injection. This is a well-known problem that's also called a pain flare. You may or may not need some painkillers. If there is associated redness and swelling you should seek advice from me, your GP or a Doctor in A&E.

# Mr. Jochen Fischer

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[www.jf-ortho.co.uk](http://www.jf-ortho.co.uk)

[www.manchesterorthopaedicgroup.co.uk](http://www.manchesterorthopaedicgroup.co.uk)

[www.advancedshoulderclinic.co.uk](http://www.advancedshoulderclinic.co.uk)

[www.orthobiologicsclinic.co.uk](http://www.orthobiologicsclinic.co.uk)

**Likely outcome:** The outcome is difficult to predict and can range from no benefit to a great success. Most patients get much better both in terms of pain and stiffness. For some patient the pain improves, but the stiffness persists. And in other patients the procedure doesn't help at all.

**Diabetic patients:** Unfortunately type 1 diabetic patients are often treatment resistant to any form of treatment for frozen shoulder. It is still worthwhile undergoing a non-invasive procedure like hydrodilatation to try and see how much of an improvement one may get. Patients often report improved pain levels, while stiffness may not improve as much. Diabetic patients need to be aware that they will receive a dose of steroids as part of the injection. This may increase their blood sugar levels for up to 2 weeks following the procedure. For patients with poorly controlled Diabetes this may be a concern that can be addressed by not giving the steroid injection during the procedure.

**Recurrence:** Some patients are perfectly fine for a few weeks after the hydrodilatation, but then the symptoms may come back. There are ways of dealing with this problem and I will discuss the options with you.

**Restrictions following the hydrodilatation:** I'm happy for you to mobilise as pain allows without any further restrictions.

**Physio:** This is very important to help making the hydrodilatation a success. You will see a Physiotherapist on the ward and will start Physio within a few days of the procedure.

**Problems following surgery:** Phone the ward for advice 01625 505416

If you would prefer to discuss this again with me prior to treatment then please contact my secretary: Tel 07935 480188, email [jfortho.secretary@gmail.com](mailto:jfortho.secretary@gmail.com)

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