

ISO 9001:2015 FS 550968

# **Treatment of arthritis of the hip FAQs**





# What is the treatment of arthritis of the hip?

The goal of treatment is to allow people to enjoy a normal, long and active life.

I divide treatment into four stages:

- 1. First stage consists of: exercise; dietary choices; food supplements; lifestyle modifications; and simple medicines.
- 2. Second stage consists of injections into the hip joint but these are only very temporary, to buy time for a hip replacement.
- 3. Third stage includes arthroscopic ('keyhole') surgery of the hip joint though in many cases this is not possible because the arthritis is too severe.
- 4. Fourth stage is joint replacement usually either a conventional total hip replacement or a resurfacing type of hip replacement.

# What is first stage treatment?

### 1. Flexibility

- Flexibility is important, and under-appreciated.
- Massage therapy helps to improve flexibility. It often provides immediate relied, and gives people a 'eureka' moment, when they appreciate the importance of flexibility.
- Stretches are very important, but most people don't enjoy stretching, and don't feel immediate benefit, so tend to neglect them.
- Hip flexor stretches are probably the most important and most neglected physical treatment.

#### 2. Physiotherapy to learn 'joint protection'

- Physiotherapy cannot cure arthritis.
- The physiotherapy mostly consists of education teaching the people how to look after themselves for example what sorts of stretch and exercise are helpful, and what is likely to make things worse.

#### 3. Swimming or cycling each morning to 'loosen up' the hip

- This can make quite a difference.
- Some people place an exercise bicycle in their bedroom and warm up for ten minutes as soon as they get out of bed.

#### 4. Soft soled shoes

- These make a big difference!
- Soft soles absorb the impact at heel strike.

#### 5. Avoid impact

- This makes quite a difference.
- Depending on the severity of arthritis, this may mean running on trails instead of tarmac, or the treadmill instead of trails, or using an elliptical machine instead of running, or simply walking on carpet instead of a hard surface.
- It is important to keep fit do not 'sacrifice' your heart and lungs to try to 'save' your hip your hip can easily be replaced, your heart and lungs not so much.

### 6. Omega Diet

- This is not proven to be effective, but makes sense in theory.
- A diet rich in Omega 3 reduces inflammation in cells bringing many benefits, including fewer strokes and heart attacks, better resistance to air pollution, and, relevant to this document, improved arthritis.
- Essentially one wants to alter the balance Omega 3 to Omega 6 fatty acids. This means more pelagic fish and less red meat.
- Some foods are fortified with Omega 3, for example some eggs.

#### 7. Glucosamine

- Glucosamine is a food supplement, not a drug.
- Glucosamine is one of the ingredients of articular cartilage.

- It is completely safe, but much glucosamine is made from the shells of shellfish, so people who are allergic to shellfish may be allergic to these formulations of glucosamine. In fact most people who are allergic to shellfish are allergic to proteins in the meat, not the shell, so allergy to glucosamine is rare, however shellfish-free glucosamine is available.
- The recommended dose is 1.5 grams once per day, however we don't know if more would be better or less would be sufficient.
- There is good scientific evidence for glucosamine in osteoarthritis of the knee <sup>1, 2</sup>.
- In the knee studies, glucosamine produced similar pain relief to a medium strength anti-inflammatory painkiller, but took up to three weeks to produce the effect.
- Glucosamine is available as 'pharmaceutical grade' (more expensive, but of guaranteed purity) and 'food grade' (cheaper, but may not contain the stated quantity of active ingredient).

## 8. Chondroitin

- Chondroitin is a food supplement, not a drug.
- Chondroitin is one of the ingredients of articular cartilage.
- There is good scientific evidence for chondroitin in osteoarthritis of the knee <sup>3</sup>.
- It is probably necessary to take high-quality pharmaceutical grade chondroitin <sup>3</sup>.
- The recommended dose is 800mg once per day, however we don't know if more would be better or less would be sufficient.

## 9. Pain Killers

- Paracetamol/acetaminophen [Tylenol or Panadol] can be taken as required for pain.
- If pain is not controlled by paracetamol, one can also take anti inflammatory pain killers such as:
  - Conventional 'non-selective' anti-inflammatories eg ibuprofen (Advil/Nurofen/ Brufen); naproxen (Naprosyn); diclofenac (Voltaren);

- Newer 'selective' anti-inflammatories eg celecoxib (Celebrex) or etoricoxib (Arcoxia).
- It is safe to take anti-inflammatories together with paracetamol.
- It is not safe to take two or more different types of anti-inflammatory together one will get increasing side-effects with little increase in pain relief.
- Anti-inflammatories, taken in normal doses, are pretty safe in long-term use.
- The newer selective anti-inflammatories are slightly safer than the older non-selective drugs, as they have fewer stomach and kidney side-effects.
- Perversely, the older, less safe anti-inflammatories are more widely available without prescription, and the newer safer drugs are mostly prescription only.
- If one has a severe exacerbation of pain one can also take an opiate (eg codeine, oxy-codone, tramadol etc) but these should not be used long-term, as they are addictive, and one rapidly becomes tolerant to the pain-killing effects.

# What is second stage treatment?

Injections of steroid, platelet rich plasma (PRP) or hyaluronic acid as required.

Steroid injections can give good pain relief for a few weeks or months <sup>4</sup>, but the effect diminishes with subsequent injections, as the arthritis gets worse. Usually the first injection is very helpful, the second average, and the third little help.

They can be very helpful to get people through an event such as a holiday prior to hip replacement operation.

I usually mix local anaesthetic together with steroid and inject both into the joint together (ie in one single injection).

The local anaesthetic works almost immediately, but only lasts for a few hours.

The steroid takes a day or two to have its effect, and the formulation I use (Diprospan) is intended to stay in the joint for as long as possible, and it probably has a chemical effect lasting several weeks.

If the hip feels significantly better for a few hours after the injection, this confirms that the pain is from the hip joint (and not, for example, referred from the spine).

If there is little difference, there are a few possibilities:

- 1. The injection was not in the hip joint.
- 2. The pain is from somewhere other than the hip.
- 3. The pain is from the hip, and the injection is in the right place, but the injection does not relieve the pain. Most likely this occurs when the source of the pain of arthritis is swelling inside the bone rather than inflammation of the joint.

It is very hard to predict whether a given injection will help <sup>5</sup>.

Very little steroid escapes from the joint into the rest of the body, so most people will not notice any effect, but two groups of people need to be careful:

- 1. Diabetics may notice their glucose control gets worse because of the steroid.
- 2. Pilots should not fly for 48 hours because of the small risk of psychological effects.

Recent evidence suggests a small increase in infection rates in hip replacements performed within three months of a steroid injection <sup>6</sup>, so I recommend waiting three months after an injection before having a hip replacement.

Steroid injections do not provide a long-term solution to the problem of hip arthritis pain. If anything, they may speed up the progress of arthritis <sup>7</sup> and possibly reduce the time to hip replacement <sup>8</sup>.

There is less evidence for PRP <sup>9</sup> and hyaluronic acid injections <sup>10</sup> than for steroids. They are both safe. Very occasionally people are allergic to, or become allergic to, hyaluronic acid.

I perform the injection freehand in the office. I've had very good success with this method, and therefore do not recommend ultrasound or X-ray guidance. There is good scientific evidence that it is possible to place an injection in the hip joint without guidance <sup>11, 12</sup>.

## What is third stage treatment?

Arthroscopy (keyhole surgery) can be helpful temporarily – meaning it may delay hip replacement for a few years - if the arthritis is not too advanced.

This option is worth considering if the Tönnis classification of arthritis on the X-ray is only grade 1, especially for younger people <sup>13</sup>.

However, in general, osteoarthritis patients are doing poorly with hip arthroscopy, with two-thirds of a large group of American patients going on to hip replacement within 2 years, and then having higher than normal rates of complications with their hip replacements <sup>14</sup>.

If you have moderate arthritis, it is better not to have an arthroscopy.

## What is fourth stage treatment?

Hip Replacement or Hip Resurfacing operation. This is the permanent solution to arthritis of the hip, and, generally, works so well it is almost miraculous.

Most patients have normal or near-normal hip function, and no restriction on their activities, including sport.

# When should I consider hip replacement?

Modern hip replacements are safe, and we believe they will last for many years – possibly for life - so there is little advantage in delay if pain is affecting sleep or daily life despite treatments outlined above.

## Are there any alternative treatments?

Because osteoarthritis is so common, many treatments have been tried. Unfortunately it is difficult and expensive to organise a scientifically valid trial to prove the effectiveness of a given treatment. Because the condition tends to wax and wane over long periods of time, it is very difficult for an individual to know for sure whether a particular treatment is helping. Apart from the treatments recommended in these FAQs, there are no other treatments of proven effectiveness.

# Is there a cure for osteoarthritis?

Unfortunately not. Disease-modifying osteoarthritis drugs (DMOAD) are in development. While there have been successes in preclinical and early clinical studies, phase 3 clinical trials have failed so far, and there is still no approved, widely available DMOAD on the market <sup>15</sup>.

# What about stem cells?

Stem cells offer great promise. They are safe. There is very little scientific evidence of their effectiveness. They may produce some short-term benefits, but there are currently no gold standard prospective randomised controlled trials proving their effectiveness, especially in the long-term.

My impression is that they are not helpful for relatively severe arthritis – meaning the sort of arthritis that makes people consider stem cells. Unfortunately I've replaced many hips which have failed to improve with stem cell injections.

There is a growing problem of 'rogue' stem cell clinics making claims which are not supported by scientific evidence, especially in countries with weak health regulation, but the problem is growing in well-regulated countries <sup>16</sup>.

## References

For the references of this article, please refer to the full version on our website: www.asiamedicalspecialists.hk.

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