IS ARTHOSCOPIC HIP SURGERY EVER A GOOD IDEA FOR FAI?

New Study Compares Surgery to Conservative Treatment

In a recent study, researchers compared the effectiveness of conservative treatment of Femoroacetabular Impingement ("FAI") to arthroscopic hip surgery.[1] The researchers concluded that surgery was more effective than non-surgical treatment. Like any study however, sometimes you have to lift the hood and look at the fine print to see what's really going on.

An analysis of the data actually shows us that neither FAI treatment was that promising. The researchers used weak results to push a pro-surgery agenda instead of looking critically at how to help people with hip pain in a safe and non-invasive manner.

Proponents of surgery will cite this study as evidence that surgery is the gold standard for treating FAI. It's happening already:

This motivated me to review the data and give you an alternative interpretation of what the study actually tells us. In this article, I'm going to explain why the conclusions of this study were misleading and what the study actually teaches us about surgery and physical therapy for FAI treatment.

The Personalized Hip Therapy Program Follows no Logical Order and is Severely Flawed

The study involved 348 study participants. 171 participants received surgery for FAI and 177 participants received something called Personalized Hip Therapy (“PHT”).

PHT included four separate components. First, researchers conducted an assessment of pain, function, and range of hip motion. Then, researchers educated patients on various exercises and treatment objectives. An exercise program was then taught in the clinic and repeated at home. Finally, participants received help with pain relief, which usually included steroid injections.

But there’s a huge problem with PHT in this FAI study.

The exercises that are included in the PHT program contain a set of exercises ***do not follow any logical order***. There is no direction on how these exercises should be administered to patients. The protocol does not identify progressions once a patient becomes stronger in a certain position or in a certain muscle.

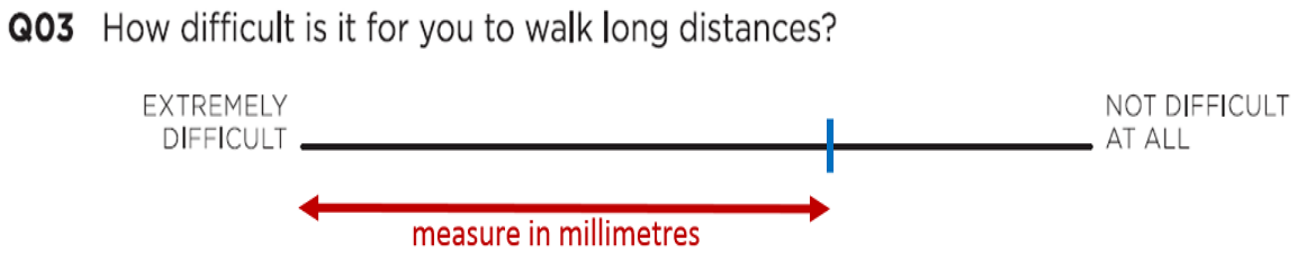
PHT does not provide regressions for patients that do not have the strength or mobility for a particular drill. There are no assessments to identify which of these exercises a particular patient actually needs. It does not provide even the most basic elements for strength/mobility development and adaptation. There are weekend warriors doing basic strength workouts that have more comprehensive training programs than the PHT protocol administered in this study.

The PHT protocol is severely flawed. Despite its limitations, the study shows us that the effectiveness of PHT is not much lower than the effectiveness of surgery for FAI. The important question here is whether either of the groups were provided the most effective treatment method for FAI. Based on the results of the study, it is clear that they did not.

The Tool used to Measure the Different Treatment Methods is Subjective and Unreliable

One year after treatment, researchers gave study participants a questionnaire, the International Hip Outcome Tool ("iHot-33"), which measures hip-related quality of life. The iHot-33 uses a subjective questionnaire asking individuals to rate certain lifestyle factors.

These factors include (1) symptoms and functional limitations, (2) sports and recreational activities, (3) job-related concerns and (4) social, emotional and lifestyle concerns.[2] A year after treatment, participants took the iHot-33 test. They marked their answers on a Visual Analog Scale (non-numbered scale) ranging from 'extremely difficult' to 'no problems at all.' The mean of each group was then calculated and compared.



How much weight can we give to these findings? As someone with chronic hip pain, you know how variable your pain levels can be each day - not to mention how variable they can be every hour!

How does someone who received hip surgery answer questions about hip discomfort compared to someone who performed exercises for a few months?

Can't there be some psychological influence here? Take a look at more examples of questions that appear on the test to decide for yourself. The iHot-33 is by definition, a subjective

survey with difficult-to-interpret results. We need solid facts when talking about surgery for FAI, and we don't get them from this study.

The Difference in Effectiveness Between Surgery and Personalized Hip Therapy was Minimal and Insignificant

The iHOT-33 consists of 100 total points. A score of 100 means no pain and perfect function, and lower scores indicate pain and poor function. The study explained that the ***minimum clinical important difference is 6.1 points***. This means that a difference of only 6.1 points between the two groups would make one method better than the other.

In the group of all participants, there was a 6.8 point difference in favor of the surgery group. In the group that followed all the study's instructions, there was an 8.2 point difference in favor of the surgery group.

The difference in the all-participant group scores was only ***.7 points higher*** than the minimal threshold of 6.1 points. The difference in the rule-following group was only ***2.1 points higher*** than the minimal threshold of 6.1 points.

With this data, the researchers concluded that surgery is more effective than conservative care. Technically, this is correct but ***by a very small margin***. The difference was a mere .7 and 2.1 points higher than the minimal significant threshold. While it is technically accurate to say that surgery beat physical therapy for treating FAI in this study, the results are hardly promising for surgery.

The Improvements in Hip Pain from Ineffective Conserviative Treatment was Impressive

The scores in the surgery group increased by 19 points while the conservative treatment group increased by 14 points. A 14-point increase for the non-surgical group is not too shabby, especially since we know the exercise routine provided was not even that great.

Non-surgical treatment included various exercises along with steroid injections. If you've read our other articles on FAI, you'll know our position on physical therapy and steroid injections.

When it comes to FAI (and all kinds of hip pain), it is important to address the particular movement dysfunctions at issue and neither of these methods accomplish this.

It's unlikely that this study addressed each study participant's individual movement dysfunctions given the holes in the PHT framework. But the non-surgical treatment group still made significant progress based on the iHot-33 results. This should provide some much needed insight for those considering surgery for FAI.

What if the study offered conservative treatment that focused on each individual's particular movement function? I'd bet the results would be quite different.

The Study did not Consider Alternative Factors for its Results for FAI treatment

The study itself acknowledges that the results of the study might be due to the placebo effect. Orthopedic surgery is well-known for having a very strong placebo effect. It's covered in articles and research studies all over the place (here's one example and another here).

The results from surgery may also be due to the effect on the muscles in the area. The last time you had a vaccination injected into your shoulder muscles, do you remember the result? The muscle was sore and probably unable to move in the same way for at least a week.

A simple shot has noticeable effects on joint motion and available range of motion. Cutting in and around a joint most definitely has effects on the way muscles around the hip joint work too. This podcast episode covers Why Hip Surgery Works.

In addition, each study participant that had hip surgery also received post-surgery rehabilitation. It is possible that the rehabilitation - and not the surgery - was the driving factor behind the slightly higher iHot-33 scores. But to test that, you'd have to run another study: two groups get surgery, one group gets rehabilitation and the other doesn't. And then you would have to compare to a third group that gets only rehab (with something hopefully better than PHT)...so that's probably not going to happen!

Conclusion

When comparing hip surgery for FAI versus conservative care, the differences are minimal in this study.

Average iHot-33 scores went up to 58.8 in the surgery group (from 39.2 before surgery) and 49.7 in the conservative group (from 35.6 before therapy).

If I told you your hip function would go from a 4 to a 6 (out of 10) after surgery, would you do it? What if I told you that your hip function would go from a 3.5 to a 5 with 12 months of physical therapy, would you do that instead?

The first option is extremely expensive, invasive, and carries risks of complications. The other doesn't have those same issues, but it requires effort, time, attention - and someone who is willing to help you solve your individual problems.

In this study, PHT, a cookie cutter program with limited options and a shockingly simplistic view of hip movements still provided some benefit - marginally worse than surgery.

Both of these options do not seem optimal.

This is because neither of these methods are effective at treating chronic hip pain.

To resolve chronic hip pain, we must improve our own individualized movement dysfunctions.

For some, this may be due to poor pelvic stability. For others it may be from limited external rotation. Or limited internal rotation. Or poor hip flexor flexibility or strength. Or adductor weakness. Or extremely atrophied glutes. Or hamstrings that have locked up and frozen over decades. There are countless possibilities and combinations.

The participants in this study did not receive a detailed assessment of their movement dysfunction. They got an over-simplified protocol that failed to even investigate hip mobility issues.

The key is to figure out what your specific movement dysfunction is and fix it. This is the route to pain-free hips and it is completely under your control.

[1] https://www.thelancet.com/action/showPdf?pii=S0140-6736%2818%2931202-9
[2] https://www.physio-pedia.com/International_Hip_Outcome_Tool_(iHOT)