

Should you have a steroid injection for shoulder pain in rotator cuff disease? Facts and decision aid

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Funding: Canadian Institutes for Health Research

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Date: 2004 Next update due: 2006

What is rotator cuff disease?

The rotator cuff is a group of tendons that surround the shoulder joint and attach to muscles that move the shoulder. In some people, the muscles and tendons are pinched when they move their shoulder over and over again. The pinching can cause the rotator cuff to swell, break down, and it may tear away from the bone – this is called rotator cuff disease or tendonitis. In a lot of people this may happen as part of normal aging and they will not have any symptoms. But many people with rotator cuff disease have pain or aching in the shoulder which may be worse at night or when lifting their arm up.

The pain will often go away after a while. Not getting treatment and waiting for the pain and swelling to go away is an option. But while waiting for it to go away, a person may not be able to or find it hard to:

- move or lift their arms
- play sports
- work well
- do daily routines

What can you do on your own to manage your disease?

- Hot or cold packs
- Rest and relaxation
- Activity that puts less stress on the shoulder

What treatments are used for rotator cuff disease?

Many kinds of treatment may be used alone or together. The common (generic) names of treatments are shown below:

1. Pain medicines and non-steroidal anti-inflammatory drugs (NSAIDs)

- Acetaminophen
- Etodolac
- Naproxen
- Acetylsalicylic acid
- Ibuprofen
- Piroxicam
- Celecoxib
- Indomethacin
- Rofecoxib
- Diclofenac
- Meloxicam
- Sulindac

2. Steroid injections

- Subacromial (into a space around shoulder joint)
- Intra-articular (into shoulder joint)

3. Physical therapy options

- Structured exercise program
- Mobilisation
- Pulsed electromagnetic field

4. Suprascapular nerve block

5. Extracorporeal shock wave therapy

What about other treatments you may have heard about?

There is not enough evidence about the effects of some treatments. For example:

- Laser therapy
- Ultrasound
- Acupuncture
- Shock wave therapy (may work if have calcium deposits around the shoulder)

What are your choices? How can you decide?

Treatment for your disease will depend on your condition and your doctor's advice. You need to know the good points (pros) and the bad points (cons) about a treatment before you can decide.

When your doctor offers you a choice of steroid injections because other drugs are not working well enough, this guide may help you.

Step 1: Be clear about the choice

What are the options?

Should you have a steroid injection when pain is bad and anti-inflammatory drugs are not working to decrease the pain of rotator cuff disease?

Steroid injections are injected into the shoulder.

When does this choice have to be made? Check one

- Within days Within weeks Within months

How far along are you with a choice? Check one

- You have not thought about it yet You are thinking about the choices
 You are close to making a choice You have made a choice

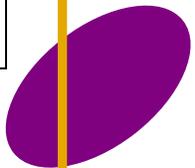
Step 2: What do you think of the pros and cons of steroid injections?

The information below is from 12 studies that tested steroid injections in people with rotator cuff disease. These studies lasted up to 1 year.

PROS AND CONS OF STEROID INJECTIONS				
PROS	How much does it matter to you?		CONS	How much does it matter to you?
Pain and movement in the shoulder may improve with a subacromial injection	* * * * *		Pain may go away on its own	* * * * *
Ability to do daily routine may improve with a subacromial injection	* * * * *		Improved pain, movement and ability to daily routine after an injection may not last long	* * * * *
Quicker relief compared to waiting	* * * * *		Temporary side effects: facial flushing, pain where injection occurs, rise in blood sugar in people with diabetes	* * * * *
Avoid the risk of major stomach side effects if NSAIDs are not taken	* * * * *		May not be better than non-steroidal anti-inflammatory drugs (NSAIDs)	* * * * *
Other pros:	* * * * *		Personal cost of injection	* * * * *
			Other cons:	* * * * *

What do you think of having a steroid injection? Check one

- You are willing to take this treatment
Pros matter more to you than the Cons
- Unsure
- You are not willing to take this treatment
Cons matter more to you than the Pros



Step 3: What role do you want to have in choosing your treatment? Check one

- I prefer to choose on my own after listening to the opinions of others.
- I prefer to share the choice with: _____.
- I prefer someone else choose for me, namely: _____.

Step 4: Find out what else you need to help you make the choice

Facts	Do you know which options you have?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Do you know both the good and bad points of each option?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Values	Are you clear about which good and bad points <i>matter most to you</i> ?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Support	Do you have enough support and advice from others to make a choice?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Are you choosing without pressure from others?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Certainty	Do you feel sure about the best choice for you?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

If you answered "No" to many of these questions, you should talk to your doctor.

Step 5: Plan the next steps

What do you need to do before you make this choice?

For example – talk to your doctor, read more about this treatment and other treatments.

Step 6: Share your answers on this form with your doctor

It will help your doctor understand what you think about this treatment.

Appendix A: Key Words are Defined

Rotator cuff disease: the rotator cuff is a group of tendons that surround the shoulder joint and attach to muscles that move the shoulder. In some people, the muscles and tendons are pinched when they move their shoulder over and over again. The pinching can cause the rotator cuff to swell, break down, and it may tear away from the bone – this is called rotator cuff disease or tendonitis. In a lot of people this may happen as part of normal aging and they will not have any symptoms. But many people with rotator cuff disease have pain or aching in the shoulder which may be worse at night or when lifting their arm up.

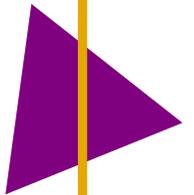
The pain will often go away after a while. Not getting treatment and waiting for the pain and swelling to go away is an option. But while waiting for it to go away, a person may not be able to or find it hard to:

- move or lift their arms
- play sports
- work well
- do daily routines

Pain varies from person to person. When it is severe, it can limit your daily routines at home and at work. Also, it can get in the way of how you feel in general about your well-being.

Steroid injections: Steroids (corticosteroids) can be injected by a needle into and around joints to relieve pain and swelling. Many different types of steroids can be injected. Steroids can also be injected into different parts of the joint or around the joint depending on where the doctor thinks the problem is.

"Intra-articular" injections means the steroids are injected into the joint. Other names of injections usually refer to where the injection is made (for example, a subacromial injection is an injection into the subacromial space at the shoulder).



Appendix B: Facts and Numbers Behind the Decision Aid

These facts are only for those who want to know more about how the decision aid was made. To make your choice, you do not need to read it.

The following are the data sources, assumptions and calculations used in this decision aid. These are the best estimates based on available data. Data are subject to review as more information becomes available.

The information presented in this patient decision aid was based on evidence referenced in Appendix C (below).

It is assumed that patients who participated in the research studies used as the data sources for this patient decision aid would be similar to patients who would use the decision aid.

Author disclosure: None of the authors or their institutional affiliations can gain financially from the information contained within this patient decision aid.

Reading level: This decision aid is estimated to be able to be understood by patients with less than grade 8 reading level. Readability was calculated using the SMOG index.

This patient decision aid meets the following draft standards of the IPDAS Collaboration © 2004:

- Used a systematic development process
See credentials of review team. Physician & consumers revised the decision aid (see list of developers). The needs assessment and review is underway with patients and physicians who were not involved in its development.*
- Provided information on the condition, options, and their outcomes
health condition, options (including doing nothing), natural history, procedures involved, positive & negative features of options, probabilities of outcomes.
- Presented probabilities of outcomes (benefits and harms)
Uses event rates, comparing same denominator, same period of time and balanced frames. Describes uncertainty around probabilities (our best guess), using more than one method (numbers, words, diagrams). There is no tailoring of probabilities to individual risk categories. Refers to reference of source of probabilities.
- Clarified values and suggested ways to communicate values with the practitioner
Describes features and physical, emotional, and social effects (Summary and glossary). Asks people to think about which positive and negative features matter most using balance scales and rating exercises. Suggests patient share their worksheet with the practitioner
- Used personal stories of how others' made their decision
Not included.
- Guided or coached in deliberation and communication.
Uses step-by-step process. Uses worksheet and suggests sharing it with practitioner.
- No coaching offered but could be used with a coach.
- Disclosed conflicts of interest
Funding source disclosed for development and distributing. Discloses conflicts of interest of authors and affiliations.
- Delivered the decision aid on the internet. Currently available only as a PDF on the internet.
An interactive internet version is under development.*
- Balanced the presentation of options.
Compares positive and negative features with similar detail and emphasis (font, order, display). Field testing for balance is underway.*
- Used plain language.
Plain language specialist reviewed the decision aid and readability level < grade 8 by SMOG.
- Based information on up-to-date scientific evidence
pending_ Evaluated its effectiveness; currently being evaluated.*

* underway in CIHR grant 2004 (Brehaut, Tugwell & O'Connor)

Appendix C: References

Buchbinder R, Green S, Ottawa Methods Group. Shoulder and elbow pain. In: Tugwell P, Shea B, Boers M, Brooks P, Simon LS, Strand V, Wells G, eds. *Evidence-based rheumatology*. London: BMJ Books, 2004.

Buchbinder R, Green S, Youd JM. Corticosteroid injections for shoulder pain (Cochrane Review). In: *The Cochrane Library*, Issue 3, 2004. Chichester, UK: John Wiley & Sons, Ltd.