

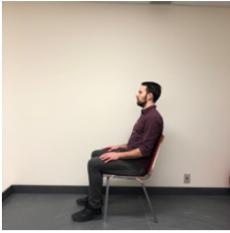
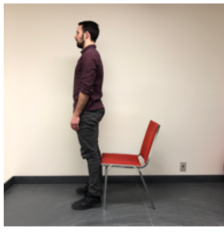
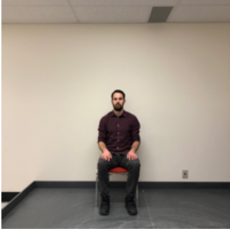

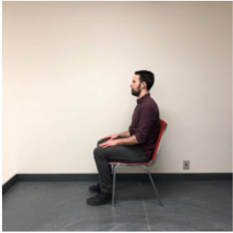
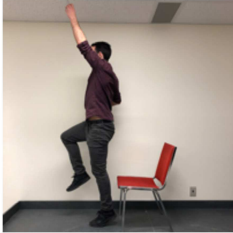





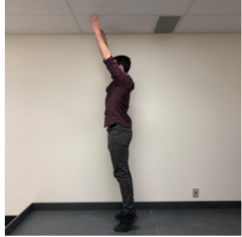



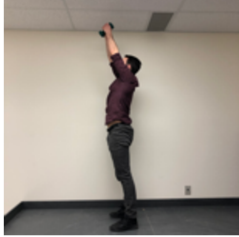
Supplementary file 2: Motor control and functional exercise program.


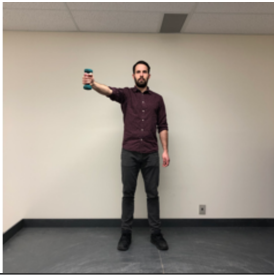
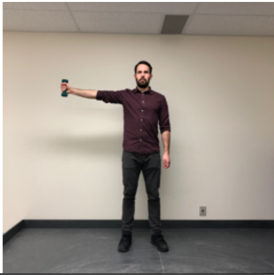

EXERCISES PROGRAM		
A) Exercise 1 : Lower limbs		
<p>1.</p> <ul style="list-style-type: none"> • Hold a ball in front of you and bend your knees • Aim for 15 repetitions. 		
<p>2.</p> <ul style="list-style-type: none"> • Perform sit-to-stand for 1 minute. • Stop if you experience significant fatigue or if you reach 1 minute. 		
<p>3.</p> <ul style="list-style-type: none"> • Continue the same exercise by adding the lifting of one leg and arm from the opposite side as high as possible. • Perform the same 		



<p>movement on the other side and sit down after.</p> <ul style="list-style-type: none"> • Aim for 1 minute. 		
<p>4.</p> <ul style="list-style-type: none"> • Progress to this level when you are able to achieve at least 15 repetitions of level 3 in 1 minute. • Continue sit-to-stand transfers, but this time, tip-toe up when you arrive in a standing position. • Aim for 1 minute and incrementally add weights. 		
<p>B) Exercise 2 : Upper limbs</p>		
<p>1.</p> <ul style="list-style-type: none"> • Without weight in the hands, bend the trunk 		



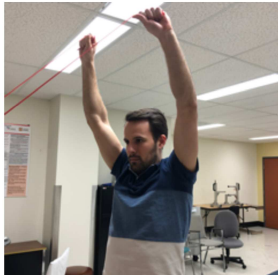

<p>slightly to touch the top of a chair and raise your arms at shoulder height.</p> <ul style="list-style-type: none">• Movement should be slow and until you feel tired or in pain (3/10).		
<p>2.</p> <ul style="list-style-type: none">• Start when you are able to perform at least 15 consecutive level 1 repetitions.• Still without weight in your hands, bend further to touch the chair seat and raise your arms even higher than the previous level.		

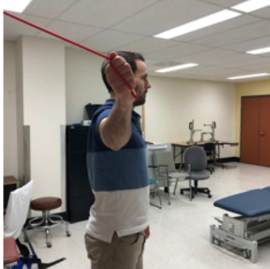

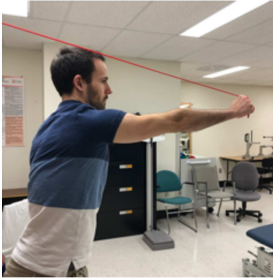
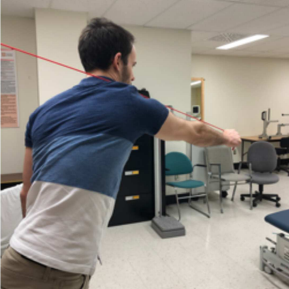
<ul style="list-style-type: none">• Movement should be slow and until you feel tired or in pain (3/10).		
<p>3.</p> <ul style="list-style-type: none">• Start when you are able to perform at least 15 consecutive level 2 repetitions.• Still without weight in your hands, bend further to touch the ground and raise your arms as high as possible.• Movement should be slow and until you feel tired or in pain (3/10).		


<p>4.</p> <ul style="list-style-type: none">• Start when you are able to perform at least 15 consecutive level 3 repetitions.• Bend to pick-up a light weight from the ground and raise it as high as possible.		
<p>5.</p> <ul style="list-style-type: none">• Start when you are able to perform at least 15 consecutive level 3 repetitions.• Progressively lift heavier weights.	<p>Same pictures as level 4</p>	

C) Exercise 3 : Arm elevation in 3 different planes	
<p>C1. Flexion (starting with a short lever if necessary)</p>	
<p>C2. Scaption (starting with a short lever if necessary)</p>	
<p>C3. Abduction (starting with a short lever if necessary)</p>	
D) Pushing	
<p>1. Wall push up</p> <ul style="list-style-type: none"> • Standing, hands resting on the wall, arms a little narrower than the shoulders at an angle of about 45 degrees. Tighten the abdominals, tuck in the chin. Do not lift your shoulders. • Push against the wall, pushing apart the shoulder blades (round the back), 	

<p>imagining that someone is pushing you on the sternum.</p>	
<p>2. Push up on knees</p> <ul style="list-style-type: none">• Place your hands slightly greater than shoulder-width apart and your knees comfortably apart. Tighten the abdominals, tuck in the chin.• Slowly bend your elbows and lower your chest until your elbows are flexed 90°, then slowly return to the starting position.	 A photograph of a man performing a push-up on his knees. He is on a blue mat, with his hands placed slightly wider than shoulder-width apart. His body is in a plank position, supported by his forearms and knees. He is looking down, and his back is straight.
<p>3. Push up</p> <ul style="list-style-type: none">• Place your hands slightly greater than shoulder-width apart and your feet comfortably apart. Tighten the abdominals, tuck in the chin.• Slowly bend your elbows and lower your chest until your elbows are flexed 90°, then slowly return to the starting position.	 A photograph of a man performing a standard push-up. He is on a blue mat, with his hands placed slightly wider than shoulder-width apart and his feet together. His body is in a plank position, supported by his forearms and toes. He is looking down, and his back is straight.

E) Pulling	
<p>1. Rowing at shoulder height</p> <ul style="list-style-type: none"> • Tie an elastic band in front of you at shoulder height. • Pull the elastic until your elbows are level with your trunk while keeping your hands parallel to the ground. Keep your trunk right, tighten your abdominals and tuck your chin. 	
<p>2. Rowing + ER</p> <ul style="list-style-type: none"> • Perform level 1. • Once in position, rotate your arm in order to bring your hands backwards. 	
<p>3. Rowing + ER + elbow extension (+squat)</p> <ul style="list-style-type: none"> • Perform level 2. • Once in position, extend your elbows and lift your hands as high as possible. 	
G) Carrying	
<p>1. Walking while carrying a weight</p> <ul style="list-style-type: none"> • Pick up a weight with your hand and walk for 5 meters while keeping your trunk 	

right. Walk back with the weight in your other hand.		
H) Throwing		
<p>1. Simple throwing motion with rubber band</p> <ul style="list-style-type: none"> • Tie a rubber band to the top of a door. • Take the rubber band in your hand and turn your back to the door. • Bring your arm forward as if you were throwing an object. Keep your trunk right, tighten your abdominals and tuck your chin. 		
<p>2. Simple throwing motion with rubber band + shoulder protraction</p> <ul style="list-style-type: none"> • Same as level 1 but bring your shoulder forward at the end of the movement. 		
<p>3. Simple throwing motion with rubber band + trunk rotation</p> <ul style="list-style-type: none"> • Same as level 2 but add a trunk rotation to the opposite side of your throwing hand. 		

I) Precision	
1. Drawing the alphabet on the wall with a ball <ul style="list-style-type: none">• Slowly draw the letters of the alphabet on a wall using a rolling ball.• As you progress, try to draw letters as little as possible.	 A photograph of a shirtless man with dark hair and a beard, standing in profile facing right. He is holding a red ball against a white wall with his right hand, appearing to be in the process of drawing or about to draw. The background is a plain, light-colored wall.



Consent form

For a patient's consent to publication of images and/or information about them in BMJ publications.

Name of patient: _____ *Marc-Olivier Dubé* _____

Relationship to patient (if patient not signing this form): _____

Description of the photo, image, text or other material (**Material**) about the patient. **A copy of the Material must be attached to this form:**

_____ *Photos for exercise program* _____

Provisional title of article in which Material will be included:

Rotator cuff related shoulder pain: Does the type of exercise influence the outcomes – Protocol of a randomized controlled trial

CONSENT

I _____ *Marc-Olivier Dubé* _____ [PRINT FULL NAME] give my consent for the Material about me/the patient to appear in a BMJ publication.

I confirm that I: (please tick boxes to confirm)

have seen the photo, image, text or other material about me/the patient

have read the article to be submitted to BMJ **am legally entitled to give this consent.**

I understand the following:

- (1) The Material will be published without my/the patient's name attached, however I understand that complete anonymity cannot be guaranteed. It is possible that somebody somewhere - for example, somebody who looked after me/the patient or a relative - may recognise me/the patient.
- (2) The Material may show or include details of my/the patient's medical condition or injury and any prognosis, treatment or surgery that I have/the patient has, had or may have in the future.

- (3) The article may be published in a journal which is distributed worldwide. BMJ's publications go mainly to doctors and other healthcare professionals but are also seen by many others including academics, students and journalists.
- (4) The article, including the Material, may be the subject of a press release, and may be linked to from social media and/or used in other promotional activities. Once published, the article will be placed on a BMJ website and may also be available on other websites.
- (5) The text of the article will be edited for style, grammar and consistency before publication.
- (6) I/the patient will not receive any financial benefit from publication of the article.
- (7) The article may also be used in full or in part in other publications and products published by BMJ and/or by other publishers. This includes publication in English and in translation, in print, in digital formats, and in any other formats that may be used by BMJ or other publishers now and in the future. The article may appear in local editions of journals or other publications, published in the UK and overseas.
- (8) I can revoke my consent at any time before publication, but once the article has been committed to publication ("gone to press") it will not be possible to revoke the consent.
- (9) This consent form will be retained securely and in confidence by BMJ in accordance with the law, for no longer than necessary. Personal data provided in this form will be used and retained in accordance with BMJ's Privacy Policy available at <https://www.bmj.com/company/your-privacy/>.

Please tick box to confirm the following:

- Where this consent relates to an article in *BMJ Case Reports*, I have/the patient has had the opportunity to comment on the article and I am satisfied that the comments, if any, have been reflected in the article.

Signed: Marc-Olivier Dubé

Print name: Marc-Olivier Dubé

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G1V0E2 Quebec (Qc), Canada

Telephone no: 418-906-2071

If signing on behalf of the patient, please give the reason why the patient can't consent for themselves (e.g. patient is under 18 or has cognitive or intellectual impairment).

Date:

-
- If you are signing for a family or other group, please tick the box to confirm that all relevant members of the family or group have been informed.

Details of person who has explained and administered the form to the patient or their representative (e.g. the corresponding author or other person who has the authority to obtain consent).

Signed: Marc-Olivier Dubé

Print name: Marc-Olivier Dubé

Position: PhD candidate (student)

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Date: May 1, 2020

Patient consent form 050419