

# **Avulsion Fracture – Hip/Pelvis**

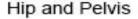
Information for Patients

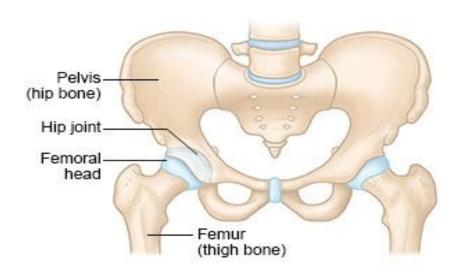
## What is a pelvic or hip avulsion fracture?

A pelvic avulsion fracture occurs when a very small part of the pelvis or hip bone is pulled too forcefully by the muscle and breaks away. Due to the structure of their growing bones this type of injury is more likely to occur in teenagers than in younger children or adults.

This can result in a sharp pop followed by pain around the hips or pelvis which can then make it sore to walk for a few days.

This injury often happens in children that are growing quickly and have tight muscles around their hips and legs. The injured area is normally sore for 1-2 weeks but with rest and gentle stretching the pain usually settles within a few weeks and it is safe to return to normal sports and activities as your pain settles and you feel able to do so.





#### What is the best treatment?

Immediately after an avulsion fracture in the hip it is important to manage it correctly, it is very important to keep your leg moving as best as possible as well as trying to reduce the pain and swelling.

The current guidance on treating a minor avulsion fracture is to follow the PEACE and LOVE principles;

PROTECTION
Avoid activities and movements that increase pain during the first few days after injury.

ELEVATION
Elevate the injured limb higher than the heart as often as possible.

AVOID ANTI-INFLAMMATORIES
Avoid taking anti-inflammatory medications as they reduce tissue healing. Avoid icing.

COMPRESSION
Use elastic bandage or taping to reduce swelling.

EDUCATION

Your body knows best. Avoid unnecessary passive treatments and medical investigations and let nature play its role.

LOAD

Let pain quide your gradual return to normal activities. Your body will tell you when it's safe to increase load.

OPTIMISM
Condition your brain for optimal recovery by being confident and positive.

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VASCULARISATION
Choose pain-free cardiovascular activities to increase blood flow to repairing tissues.

Restore mobility, strength and proprioception by adopting an active approach to recovery.

BJSM, 2020

#### What if I need pain relief?

To manage your pain and keep your hip moving it is advised that you initially take regular simple pain relief. This can be bought over the counter from a pharmacist. If you have any allergies or conditions which affect the use of pain relief or any questions or concerns please seek advice from your GP or a pharmacist.

## Rehabilitation and recovery

If you follow this advice leaflet your injury should take around 6-8 weeks to heal. However, everyone recovers from injuries at different rates and it is dependent on the severity of the injury, the soft tissue that was involved and the presence of any other medical problems.

Weeks since injury	Goals and expectations.
0-2	If you have been given crutches in ED use these as required in the early stages. You should attempt to wean of them as soon as possible and resume normal activities as soon as your hip feels comfortable and you feel able to.
	It is safe to move and put as much weight through your leg as soon as you feel able to both with or without crutches.
2-4	Start to try and add in some gentle cardiovascular activity like cycling or swimming as you feel able to as well as keeping other parts of your body moving like doing core stability exercises or upper body exercises if you have access to a gym.
	If after 2-3 weeks, you are still struggling with any of the following, please contact the physiotherapy department on 0131 3121079 and ask to make a self referral;
	<ul> <li>Still having difficulty fully bending and straightening your hip and knee</li> <li>Are unable to put all of your weight through your leg without crutches</li> </ul>
4+	If you have followed all of the exercises within this guide and gradually built up your activity levels it is safe to start re-introducing more challenging activities such as gentle running and jumping.
	You can also start adding in more sport specific activity as you feel able to and make a gradual return to training. Remember to always be guided by your hip – a little bit of pain that goes away quickly is normally nothing to worry about but if you are experiencing high levels of pain that don't settle quickly you should contact the physiotherapy dept on 0131 3121079.

#### **Initial exercises**

Try and start working through the following exercises as soon as you can – it is safe to start these exercises right from the day after your injury;



1. Lie on your stomach and bend your knee, hold onto your foot with your hand and gently pull your heel down towards your bottom.



Hold for 30 seconds and repeat 3 times on each leg, twice daily.

Keep doing this exercise daily until you can comfortably get your heels to touch your bottom.



2. Lie on your back with your hands holding the back of your thigh, gently straighten your knee until you feel a stretch down the back of your leg and behind your knee.

Hold for 30 seconds and repeat 3x10 times, twice a day.



3. Lie on your back and place your ankle across your other thigh, then gently pull your leg towards you as shown until you can feel a stretch across your bottom.

Hold for 30 seconds and repeat 3x10 times, twice a day.



4. Lie on your back with a ball or cushion between your knees. Gently lift your bottom up off the floor, hold for 5 seconds and then lower back down to the floor again.

Repeat 3x10 a day.

## **Exercises progressions**

Start these exercises as soon as your movement has returned and your pain has settled:



1. Stand on one leg whilst lifting the other up, out and forwards as shown in the picture like you are lifting your leg over a block, then reverse the movement.

Repeat 5-10 times on each leg and repeat 2-3 times a day.



2. Lie on the floor with your arms and legs lifted as shown in the picture. Slowly lower your right arm and your left leg as shown, return to the starting position and repeat with your other arm and leg.

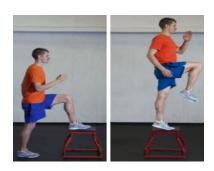
Try and keep your lower back gently pressed into the floor as you move your arm and leg and only stretch them out as far as is comfortable.

Repeat 3x10 a day.



3. Stand on your affected leg in front of a sturdy chair. Slowly sit down into the chair until you touch it with your bottom/backs of your legs then stand back up again.

Repeat 3x10 times a day.



4. Stand at the bottom of your stairs or in front of a high step. Place your injured leg up on to the step and step up like in the picture, try to keep your other leg off the step then step then slowly step back down keeping the movement smooth and controlled.

Repeat 3x10 times each day.

## Return to sports and activity

Once your hip is no longer painful and the movement is much better you can gradually return to gentle activities.

As your leg/hip continues to feel better you can gradually return to your usual activities ensuring you warm up and cool down fully.

If you feel as though you are able to, you do not have to wait for the go ahead from a health professional to return to your normal activities.

## Do I require further treatment?

If you have regained full movement at your hip, are able to walk and run pain free and have been able to return to your normal sports and activities you don't need any further assessment or treatment.

If you do have any concerns or are struggling to return to your normal activities please call the physiotherapy department to make a self referral.

#### **Further advice**

If you have followed all of the advice above and you are still struggling with your symptoms you can contact the physiotherapy department on details below.

Physiotherapy Team
Therapies Department,
Royal Hospital for Children and Young People,
50 Little France Crescent
Edinburgh
EH16 4SA

Telephone 0131 312 1079