



## YOUR GUIDE TO

# UMBILICAL HERNIAS

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## Introduction

**Please take note of the following before starting any of the exercises in this guide:**

- The information contained in this guide is intended to assist in managing your recovery.

- Many people have found quick and lasting relief from their hernia related symptoms by acting upon the information provided, but everyone decides for themselves what to do with this information. Should you doubt a particular exercise in your situation, please consult your health professional.

**When consulting your health professional, it is wise to take this guide with you to show them.**

- This guide is complimentary to other medical services and is not intended as a substitute for a health care provider's consultation.

- Never disregard medical advice or delay in seeking it because of something you've read in IPRS's "Your Guide to Umbilical Hernias".

# What is an Umbilical Hernia?

Umbilical hernias, and nearby hernias called paraumbilical hernias, develop in and around the area of the umbilicus (belly button or navel). A congenital weakness (meaning present since birth) exists in the naval area in the region where vessels of the fetal and infant umbilical cord exited through the muscle of the abdominal wall. After birth, although the umbilical cord disappears (leaving just the dimpled belly-button scar), the weakness in the muscle may persist. Hernias can occur in this area of weakness at any time from birth through late adulthood. As the weakness progressively bulges and opens, abdominal contents are permitted to protrude through.



## WHAT ARE THE SIGNS AND SYMPTOMS OF AN UMBILICAL HERNIA?

You should contact your doctor if you experience any of the following symptoms:

- Navel deformity and an associated bulge creating an "outie" instead of the normal "innie" navel.
- Pain at or near the navel area.



**Umbilical hernia repair before and after surgery.**

## CAN AN UMBILICAL HERNIA HEAL BY ITSELF?

In infants an Umbilical hernia may often appear at or just after birth but most often gradually close by the age of 3 or 4. Surgery, if necessary, can often be delayed until that time.

However, in adults, Umbilical hernias cannot "heal" and gradually increase in size, often becoming progressively problematic as they enlarge. Incarceration (entrapment of the intestine in the hernia cavity potentially causing intestinal blockage) or strangulation (compromise of the intestine's blood supply leading to gangrene) of a hernia may occur on the occasion of large and neglected Umbilical hernias.

## Warning signs of incarceration or strangulation include:

- Severe abdominal pain or distension (bloating)

Pictures from: North-Penn Hernia Institute <http://hernia.tripod.com/index.html>

- Nausea and vomiting
- Redness or tenderness/pain at the site of the hernia/bulge

## WHAT TREATMENT IS AVAILABLE FOR UMBILICAL HERNIAS?

Hernias in adults, either primary or recurrent, cannot be cured medically nor can they be healed by diet or exercise but rather require surgical correction for effective therapy. There are different types of surgical hernia repairs available.

- 1. Open repair:** the surgeon uses a single large incision using standard instruments.
- 2. Laparoscopic repair:** the surgeon uses several small incisions using a video camera and special instruments.

Most hernia repairs today use the Laparoscopic technique as it has several advantages over the open technique which include:

- Less pain
- A quicker recovery
- A faster return to normal activities and work
- Smaller scars

The latest surgery technique uses a mesh 'screen' or 'patch' to repair the hernia. According to North Penn Hernia Institute, this technique is "not only the safest but also the most effective contemporary method for hernia repair available today".

This technique uses a sterile, pliable and yet remarkably strong mesh to cover and reinforce the hernia defect and surrounding weakened tissue. The mesh is safely placed under the muscle defect where it is most effective and cannot be later lifted off or separated by abdominal pressure or strenuous physical activity. This means that the hernia is immediately repaired with no unnecessary cutting which aids the rapid return to activity. Since the mesh is thin, pliable and flexible, the patient is totally unaware of its presence and activity is not limited after hernia surgery.

Umbilical hernia repair is usually a 'one day' procedure. If the laparoscopic technique is used, the surgeon may use mild sedation and local anaesthesia for the procedure, thus avoiding the risks of general anaesthesia.



**Diagram showing laparoscopic repair of an inguinal hernia**

Picture from: Comprehensive Centre for Laparoscopic Surgery [www.lapsurg.org/hernia.html](http://www.lapsurg.org/hernia.html)

## When can I return to normal activities?

Under most circumstances following Umbilical repair using the laparoscopic technique, patients are permitted to drive in about 2-3 days.

People's job descriptions and duties do vary.

- **Sedentary job** (e.g. standing or sitting at a desk, counter or computer; not requiring lifting over 50 pounds; short distance driving): patients may safely return to work within 2-3 days including driving to and from work.
- **Light to moderate physical activity** (e.g. delivery personnel, maintenance workers, light construction workers, retail sales, mechanics, plumbers and not requiring lifting over 50-80 pounds): patients can usually return to work, unrestricted in most cases, after 10-14 days.
- **Heavy labourers** (e.g. heavy

construction workers, climbing necessary, required to lift more than 80 pounds): patients may require 2-3 weeks of recuperation to return to both a safe and comfortable workplace without employment restrictions. If available return to light activity in 1 week, or moderate activity in 2 weeks should be considered.

**The information in this leaflet comes from extensive research that IPRS has done, and our own experience and results. The following are user friendly documents to gain more information:**

- Emedicinehealth.com (<http://www.emedicinehealth.com>)
- The British Hernia Centre (<http://www.hernia.org/>)

References:

1. North Penn Hernia Institute.
2. British Hernia Centre: 1999-2005

## What about exercise?

**The British Hernia Centre encourages as much activity as soon as possible.** Short and more frequent periods of activity are more beneficial than longer, more strenuous activity. The main focus of the exercise programme is to strengthen the abdominal muscles. This will improve and give additional support to the injured area and prevent a re-occurrence.

It is important that while exercising, the intra-thoracic pressure is not increased (Valsalva effect) and the abdominal muscles are not strained. This can be avoided by using the correct breathing techniques while

doing the exercises. During all exercises do not hold your breath. For the duration of the exercise you should breathe out during the strenuous phase of the exercise and breathe in when relaxing. This will be indicated on the exercise sheet later on.

### WHAT EXERCISE SHOULD I DO?

- **24-48 hours after surgery:** Light stretching is recommended. Avoid straining and over-stretching.
- **After GP clearance:** Isometric contractions (muscular contractions with no associated movement)

Exercises >>>>

# Exercises phase 1

It is important that you do these exercises gently. You should feel a stretch and the muscles working, but should not feel discomfort. Use your own comfort levels to determine the intensity at which you do the exercises.

**IMPORTANT:** If any of your hernia symptoms return, stop and consult your GP.

## STRETCHING EXERCISES: 28-48 hours after surgery

Repeat each of these stretches two times for at least 30 seconds. Hold a steady stretch, do not bounce, do not force into pain.



### ABDOMINAL STRETCH

Standing against a wall. Clasp hands together and slowly reach hands up to the ceiling as far as you can. You should feel a stretch in your abdominal muscles. Then alternating arms, slowly push one arm up to the ceiling then the other.



### LUMBAR ROTATION

Slowly rock knees from side to side in a small, pain-free range of motion. Allow the lower back to rotate slightly.

# Exercises phase 2

## STRENGTHENING EXERCISES: 2-6 weeks after surgery

Do 3 sets of 10 of each exercise. Do each exercise slowly and controlled. Remember to concentrate on breathing correctly.



### UNILATERAL ISOMETRIC HIP FLEXION

Tighten stomach muscles and raise knee to outstretch arm. Gently push, keeping arm straight and trunk rigid.

Breathe out when pushing against the knee.



### BILATERAL ISOMETRIC HIP FLEXION

Tighten stomach muscles and raise both knees to outstretched arms. Gently push, keeping arms straight and trunk rigid. Breathe out when pushing against the knee.



### BRIDGING

Slowly raise hips from floor, keeping stomach tight.

Breathe out when lifting hips.



### PELVIC TILT

Flatten back by tightening stomach muscles and buttocks while tilting pelvis towards you.

Breathe out while flattening back.

# Exercises phase 3

## STRENGTHENING EXERCISES: 6+ weeks after surgery

Do 3 sets of 10 of each exercise. Do each exercise slowly and controlled. Remember to concentrate on breathing correctly.



### STRAIGHT LEG RAISE

Tighten stomach muscles and slowly raise locked leg 8-12 inches from floor. Breathe out when lifting leg.



### CURL UP

With arms on your thighs, tilt pelvis to flatten back. Raise shoulders and head from floor. Use arms to support trunk if necessary. Only lift shoulders until the tips of your fingers reach your knees. Breathe out when lifting shoulders.



### DIAGONAL CURL-UP

With arms at sides, tilt pelvis to flatten back. Raise head and shoulders, rotating to one side as shoulder blades clear floor. Breathe out when lifting shoulders.

# Contact us

This guide is designed to assist you in the self-management of your injury/condition.

We are here to assist your recovery in the shortest but safest possible time. If you have any uncertainties or queries regarding the information, please do not hesitate to contact us on:

Phone 017890400999 / 07870166861  
[www.mdphysiotherapy.co.uk](http://www.mdphysiotherapy.co.uk)