

Pharmacy Department

## Estradiol Patch

Information for parents, carers and young women

### Why is it important to have this medicine?

Estradiol is a form of the female hormone estrogen which is produced normally in the ovaries. Estradiol is used to replace estrogen in conditions where the body cannot form its own or is not forming enough.

### How is estradiol given?

Estradiol comes in the form of a patch which is applied directly to the skin. It then passes slowly into the bloodstream through the skin. At Alder Hey we stock two strengths of the medication.

'25' releases 25 micrograms of estradiol every day.

'50' releases 50 micrograms of estradiol every day.

The patch that the doctor prescribes will depend on the age and condition of the patient.

### Before using the estradiol patch

The doctor or pharmacist should be informed:

- If the patient is allergic to any of the ingredients listed in the patch
- The patient has a blood problem known as porphyria.



### How and when the estradiol patch should be applied

The doctor will have worked out the correct proportion of the patch (dose) to be used. The dose will be shown on the label. The patch is normally applied at night.

### How to cut the estradiol patch

**To obtain half (1/2) of a patch:** Cut the patch diagonally from end to end.

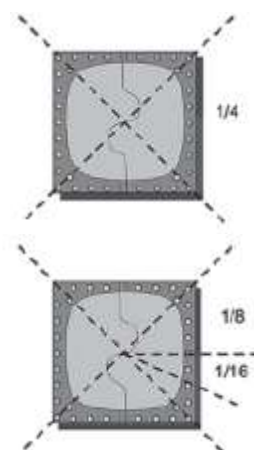
**To obtain quarter (1/4) of a patch:** Cut the patch in half and halve again so that the patches are equal either side

**To obtain an eighth (1/8) of a patch:** Cut the patch to a quarter and halve again so that the patches are equal either side.

**To obtain a sixteenth (1/16) of a patch:** Cut the patch to an eighth and halve again so that the patches are equal either side

Once the estradiol patch has been cut, the remaining section of the patch should be returned to its cover and stored in the fridge. Discard this after one week.

**The dotted lines in the diagrams below show where to cut the patch.**



## Applying the patch

### Step 1                      How to open and peel the estradiol patch

Use the notches as a guide and tear along two edges of the patch. With the protective backing facing you, bend and peel half of the backing strip

### Step 2:                      How apply and press the estradiol patch

Apply the open half of the patch to your skin. Remove the remaining backing strip and press down the rest of the patch. Press the patch with the palm of your hand to make sure it is firmly stuck.

If you are cutting the patch, you may have to use additional adhesive tape to secure the patch in place.

## Where to apply the estradiol patch

Apply the estradiol patch to clean, dry, cool skin as soon as you open the protective pouch.

Stick the estradiol patch onto a hairless area of skin below the waist.

Keep the estradiol patch covered, out of direct sunlight.

It can be worn under loose areas of clothing.



### Do not

- Apply the patch on the same area of skin twice in a row.
- Apply on or near the breasts.
- Put it on top of cuts, spots or anywhere the skin is irritated.
- Use cream, moisturiser or talcum powder before applying the patch.
- Wear the patch under tight clothing, elasticated areas or a tight waistband

## Everyday activities

Patients using estradiol patch can:

- Have a bath or shower as normal. Care should be taken not scrub too hard on and around the patch as this can loosen the edges.
- Go swimming. The patch will not be affected
- Exercise and play sports.

## Changing the estradiol patches

The estradiol patch must be changed every **three days** (72 hours) to give the body a steady supply of hormones.

## Removing an estradiol patch

1. Peel an edge of the patch smoothly away from the skin.
2. Fold the used estradiol patch in half, so that the sticky side sticks to itself.
3. Dispose of the estradiol patch in with the household rubbish, safely out of the reach of children and pets.
4. Do not flush the used patches down the toilet.

When the estradiol patch is removed some glue may remain on the skin. It will disappear with time; baby oil can be used to remove the remaining adhesive.

## What to do if an estradiol patch falls off

A new estradiol patch should be applied. If the patch has fallen off after the patient has just had a bath or shower, they should wait until the skin cools before a new patch is applied. The prescribing doctor should be contacted if more estradiol patches are needed. If a patch is not changed as usual another patch should be applied as soon as possible.

## When should the medicine start working?

This medication will work gradually as estrogen is replaced into the body. Before stopping estradiol patches for any reason the prescribing doctor should be contacted.

## Are there any possible side effects from using estradiol patches?

Like any medicine, estradiol may have side effects but not everybody gets them.

Very Common Side effects	Common side effects	Uncommon side effects	Rare side effects
Irritation of the skin where the patch is applied.	Red puffy skin where the patch has been applied.	Wind.	Bloated feeling.
	Headache	Fuller Breasts. Muscle pain.	
	Weight gain.	Build-up of fluid under the skin (OEDEMA.)	
	Loose stools.		
	Dizziness.		

There are risks of taking hormone replacement therapy in post-menopausal women, **these risks do not apply to girls and women under the age of 50**, this treatment is just replacing the hormones that the body should normally be making at this age.

**The estradiol patch must be removed and the doctor informed straight away if there is a reaction or suspected allergic reaction or to this medicine as urgent medical attention may be needed.**

**Signs of allergic reaction include:**

- difficulty breathing or swallowing,
- swelling of the face, lips, tongue and/or throat,
- severe itching of the skin,
- A red rash or raised lumps.

### **Can other medicines be taken at the same time while the patch is applied?**

The doctor/pharmacist should be told if any other medication is being or about to be taken including over the counter medicines. This includes herbal or complementary medicines.

Medicines that contain paracetamol or ibuprofen can be taken, **unless the doctor has advised otherwise.**

### **Where should estradiol patch be kept?**

- Store this medicine in a cool dry place.
- Do not store above 25 degrees centigrade.
- Keep the estradiol patches in the original packaging.
- Discard the medication after the expiry date.
- Keep out of reach and sight of children.



### **General advice about medicines**

- Never give this medication to anyone else, even if their condition appears to be the same, as this could do harm.
- If you think someone else may have taken the medicine by accident, contact your doctor straight away.
- Make sure that you always have enough medicine. Order a new prescription at least two weeks before you will run out.
- Make sure that the medicine you have at home has not reached the 'best before' or 'use by' date on the packaging. Give old medicines to your pharmacist to dispose of.
- This leaflet should be read with any manufacturers' patient information

### **Who to contact for further details**

If you have any questions about your medication whilst you are in hospital, please do not hesitate to ask one of the Pharmacy team, alternatively you can telephone us on 0151 252 5311.

### **Reference**

Carina Ankarberg-Lindgren et al. Physiological Estrogen Replacement Therapy for Puberty Induction in Girls: A Clinical Observational Study. *HORMONE RESEARCH IN PAEDIATRICS* 2014; 81 p239-244

This leaflet only gives general information. You must always discuss the individual treatment of your child with the appropriate member of staff. Do not rely on this leaflet alone for information about your child's treatment.

This information can be made available in other languages and formats if requested.

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