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## Polyethylene implants

### What are polyethylene implants?

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Polyethylene implants are porous synthetic polymers that are biologically inert and non-biodegradable in the body. MEDPOR® Biomaterial Implants are a brand of high density polyethylene (HDPE) solid implants that have been used by plastic surgeons since 1985 in facial augmentation, either for reconstructive or cosmetic purposes. Its porosity allows for soft tissue and vascular ingrowth, which helps in keeping the implant in place. Mesh forms of HDPE include Prolene® and Marlex®.

### Where can polyethylene implants be used?

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Polyethylene implants are used in chin, cheek and jaw line reconstruction. The material can be carved or contoured to fit a particular 3-D space. It is also widely used for facial repair following accidents and for correction of congenital defects.

### Am I suitable for polyethylene implants?

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Most people tolerate polyethylene implants very well. It is a non-toxic polymer that the body does not recognize so "rejection" is very rare.

### How are polyethylene implants inserted?

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The procedure is carried out at your doctor's rooms. The length of time will depend on what corrections are being made but usually take up to about 1 hour.

#### Procedure for polyethylene implantation

1. Implantation site is prepared with an antiseptic solution.
2. Local anaesthetic is used to numb the site.
3. Small incision is made at the implantation site.
4. Tissue from the area is gently lifted to create a small tunnel or pocket for the implant.
5. Implant is inserted and trimmed if necessary to fit the requirements of the correction.
6. Implant is secured in place by suturing the incision(s).
7. Sutures removed after 5-7 days.

### How long do polyethylene implants last?

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Polyethylene implants are considered permanent. They can be removed, although with more difficulty than implants such as [silicone](#), which do not allow for tissue integration to occur.

### Are there any side effects from polyethylene implants?

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Implants are usually well tolerated. You can expect some discomfort directly after the implantation. There may be some swelling, aching, and numbness but these usually resolve after a week or so.

The following complication may rarely occur:

- Infection of the implant site
- Extrusion (part of the implant comes through the skin)
- Induration (hardening of the area operated on)
- Seroma (dense pocket of fluid below the skin)
- Inadequate healing
- Overcorrection or undercorrection

#### Related information

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##### Other websites:

emedicine, the online textbook

- [Facial augmentation](#)
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If you have any concerns with your skin or its treatment, see a [dermatologist](#) for advice.

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