Skin disorder: Port-wine stains or birthmarks

A port-wine stain, also called a capillary malformation, is a flat, light-to-dark-red or purple birthmark made of small dilated blood vessels in the skin. It gets its name from its reddish color, which looks like wine. A port-wine stain is usually present at birth and often found on the nose, forehead, chin, or cheek. It can also appear on the arms and legs.

What happens if my child has a port-wine stain?

Port-wine stains usually grow in proportion with your child’s growth and don’t go away on their own. They often become darker red or purple over time, and the skin may get thicker. Most children with port-wine stains don’t have other health problems, but rarely, they may have:

• Brain and eye problems because of a forehead or eye port-wine stain (a condition called Sturge-Weber syndrome).

• Teeth, jaw, and gums under a port-wine stain that slowly get bigger over time.

Port-wine stains affect 1 out of every 200 children each year, but only about 10% of children with certain facial stains will have Sturge-Weber syndrome. Most children with port-wine stains have them on only one side of their body.

What causes port-wine stains?

Port-wines are usually caused by a small change in a gene in the birthmark called GNAQ. They happen randomly and are not inherited.

How are port-wine stains treated?

Port-wine stains can be treated with a pulsed-dye laser (PDL). This can help lighten the port-wine stain’s color and may prevent it from darkening and becoming thicker over time. The red blood cells in the port-wine stain absorb the energy from the laser, become hot, and are destroyed.

If your child has PDL treatment:

• They usually have 4–8 laser treatment sessions about 6–8 weeks apart.

• They may start treatments before they’re 1 year old because the laser may work better while the skin is thin.

• They may have general or topical anesthesia or may have no anesthesia, depending on the port-wine stain’s size and location.

What happens after port-wine stain treatment?

After your child has PDL treatment, they may have:

• Bruising that lasts 2–3 weeks

• Soreness

• Redness, swelling, and itching

• Skin blistering (this is rare)
To help your child:

- Apply an ice pack to the treated area to reduce swelling.
- Protect the treated area from the sun so it doesn’t become tan or discolored.

Most port-wine stains treated with pulsed-dye lasers will get at least 50% lighter. However, stains on the face or neck respond better to PDL treatment than stains on other parts of the body.

It’s hard to completely get rid of the port-wine stain even with laser treatment. The remaining stain can begin to darken over time, so your child may need more treatment later.