

Naevus of Ota (NOO) and Ito (NOI)

What is it?

Naevus of Ota is a pigmented birthmark that is slate-brown or blue/grey in colour. When examined under a microscope, the pigmented naevus cells are found in the deep layer of the skin (dermis).

What causes it?

The precise cause is unknown. However, GNAQ or GNA11 mutations have been found in the dermal melanocytes seen in this condition. Hormones may play a role.

What does it look like?

NOO and NOI are all smooth, non-scaly blue-grey, blue-brown spots. They are usually small spots that connect to form larger continuous areas of pigmentation.

Naevus of Ota refers to a lesion, usually present at birth or young adulthood, on one side of the forehead and around the eye. Some people may also have pigment on the sclera (eyeball), cornea and inside the mouth including the palate.

Naevus of Ito occurs on the shoulder and upper arm region and is present at birth in the majority of instances. It may coexist with NOO.

Hori's neavus is a different condition but is similar to Naevus of Ota when examined under the microscope. It is spotty rather than continuous and located on both sides of the face. It occurs more commonly in women and in Asian populations (especially East Asian). Small pinpoint discrete brown macules typically affect the prominence of the cheek but the lateral temples, eyelids and the nose may also be involved.

How is it diagnosed?

Naevus of Ota is usually diagnosed after examining the colour and pattern of the pigment. A small sample of skin (biopsy) may be taken to confirm the diagnosis and exclude other causes of pigmentation such as melasma, medication-induced pigmentation, lichen planus pigmentosus and post-inflammatory pigmentation.

How is it treated?

Laser surgery

Laser is the mainstay of treatment for this condition. Quality(Q)-switched lasers (Nd:YAG (1064nm and/or 532nm), Ruby (694nm) or Alexandrite (755nm)) are usually used. Several treatments 2 to 3 months apart are required to lighten pigmentation. Risks involved with the treatment are low. Ten or more treatments are usually needed.

Newer picosecond laser technology may be helpful for this condition but further studies are required to prove this type of laser has any advantages over the abovementioned methods.

Photographs are taken at baseline and to assess progress during treatment.

If the eye is affected with pigmentation, review with an ophthalmologist should be arranged.

While **camouflage** with makeup is often cited as a treatment for this condition, cosmetically

acceptable skin colour matching is hard to achieve