

Information Leaflet for Patients

A detailed illustration of a skin cross-section, showing the epidermal layer with its characteristic brick-like pattern of keratinocytes and the underlying dermal layer. The illustration is rendered in a soft, pinkish-purple color palette. Overlaid on the skin are several concentric, semi-transparent circles in shades of purple and pink, creating a decorative graphic element.

HAIR IN THE NEONATE

The aim of this leaflet

This leaflet is designed to help you understand more about neonatal hair, when it is normal or abnormal, if treatment is necessary, and answers to common questions.

This leaflet also focuses on the most common physiological changes that may lead to an incorrect diagnosis.

HAIR IN THE NEONATE

What are the different types of neonatal hair?

In the neonate (a baby who is less than 4 weeks old), hair may vary widely in terms of the amount, distribution, shape, and colour. In many cases, familial, racial, or even personal differences may explain these variations, but in a few cases, hair may be the clue to the diagnosis of a hidden, sometimes severe disease. Hair conditions in the neonate can be classified into either temporary benign conditions or genetically-determined diseases.

It is often difficult to distinguish between normal and abnormal hair appearance in infants. Dermatologists can fortunately find out when to “rule out” or exclude the presence of many disorders by using clinical evaluation or simple diagnostic techniques. Hair is easily accessible to examination and is a non-invasive method, so in most cases, observation of the hair shaft under the microscope alone may be of great help in making the correct diagnosis.

Several neonates, usually during the second month of life, develop an *alopecic* patch (lacking hair) on the *occipital* region (back of the head) that has been called *neonatal occipital alopecia*. This very well-known infantile manifestation is usually not associated with any skin changes or other clinical findings. It usually involves a clearly marked oval area without hair (**Figure 1**).

For many years, the cause of *neonatal occipital alopecia* has been claimed to be friction due to the position of the baby on its bed (*supine*, or lying on the back). This hypothesis is usually supported by parents and by most paediatricians who care for babies. Recently, the term *transient neonatal hair loss* has been proposed to describe this phenomenon, which has been discovered to be unrelated to friction.



Fig.1 *Transient neonatal hair loss* is a common condition that resolves spontaneously with no need of treatment

Where does the cycle of normal hair shedding come from?

In mammals, the hair cycle is synchronized such that the entire hairy covering grows continuously through the winter. When summer comes, growth abruptly ceases and “cephalocaudal moulting” (hair shedding) starts.

This synchronised growth pattern also occurs in human hair *in utero* (in the womb). The physiologic hair cycle of fetal hair is the real cause of the localized shedding of the *occipital* hair, otherwise called *transient neonatal hair loss*.

How can I know if further testing is necessary?

Clinical observation of the hair covering the scalp of an infant by a dermatologist will usually be enough to assess if further testing should be carried out. The dermatologist is the specialist for hair disease. If you believe that your child is suffering from a hair disease, please contact a dermatologist.

What are the treatment options?

Most occurrences of hair loss do not need any treatment, as the majority will resolve spontaneously. In some severe cases, a specific treatment can be used.

Unfortunately, some genetic disorders of hair growth (*genotrichoses*) do not have any cure, even though daily care and appropriate cosmetic procedures may help preserve genetically fragile hair.

What are risk factors for genetically-related conditions?

If hair alterations are associated with weird or odd-looking nails, or the neonatal teeth show strange aspects when they appear, a genetically-determined condition should be considered. If other members of the family are affected by a genetic skin disorder (*genodermatosis*), the hair might be the first clue to the diagnosis of the newborn.

What are some common questions and their answers about neonatal hair?

What is normal hair for my baby and what is not?

Hair shows an enormous variation in terms of the amount, distribution, shape, and colour. If the hair alteration is an isolated finding and other members in the family had a similar appearance at birth, the infant does not need to be seen urgently by a dermatologist.

What signs should aware me that something is going wrong?

During the first six to nine months of life, your child's hair changes from thin unpigmented hair to normal infantile hair. If this is not happening, you should take your child to a dermatological clinic.

How much hair is normal?

There is a wide variation in terms of the quantity of hair at birth related to racial, familial, and even individual factors. It can be normal to be born with no hair at all or with the scalp fully covered with hair.

Are all neonates born with hair?

No, approximately 30% of neonates are born with very thin hair and they may look like they have no hair at all. In most cases, the situation will resolve spontaneously in a few months.

Is the hair present at birth going to remain for the rest of my child's life?

No, some neonates are born with a small amount of thin unpigmented hair, and upon adulthood, they may have a thick, impressive amount of hair. On the contrary, some very hairy neonates may have a scarce amount of hair as adults.

Is the hair distribution at birth going to be the same for the rest of my child's life?

No, many neonates show a rather peculiar hair distribution that will change with time.

Is the hair colour going to be the same for the rest of my child's life?

No, hair and skin can change over time. Some infants are born with pale hair that may later on become pigmented. ■