

# Neoplasia

## ■ What it is

**Neoplasia** or **neoplasm** is an abnormal mass of tissue arising from an abnormal proliferation of cells not controlled by the surrounding tissue. As this excessive growth persists, a **lump** or tumour is usually formed.

## ■ Diagnosis

The key in diagnosis is determining if a **tumour is benign or malignant**. This can only be found out with certainty through tests in a laboratory.

The first diagnostic step includes ordering **imaging tests** to have the best view of the inside of the patient's body.

These help the doctor view the tumour as a whole and the area **affected**. Imaging tests include: ultrasounds (to determine if the mass is solid or liquid), X-rays or magnetic resonance. Once the doctor has seen the image, the next step is a biopsy, i.e. the removal of a small part of tissue, which will be examined under a microscope.

**affected:** *interessato, colpito da*

**growth:** *crescita, escrescenza*

**imaging test:** *diagnostica per immagini*

**lump:** *massa, gonfiore*

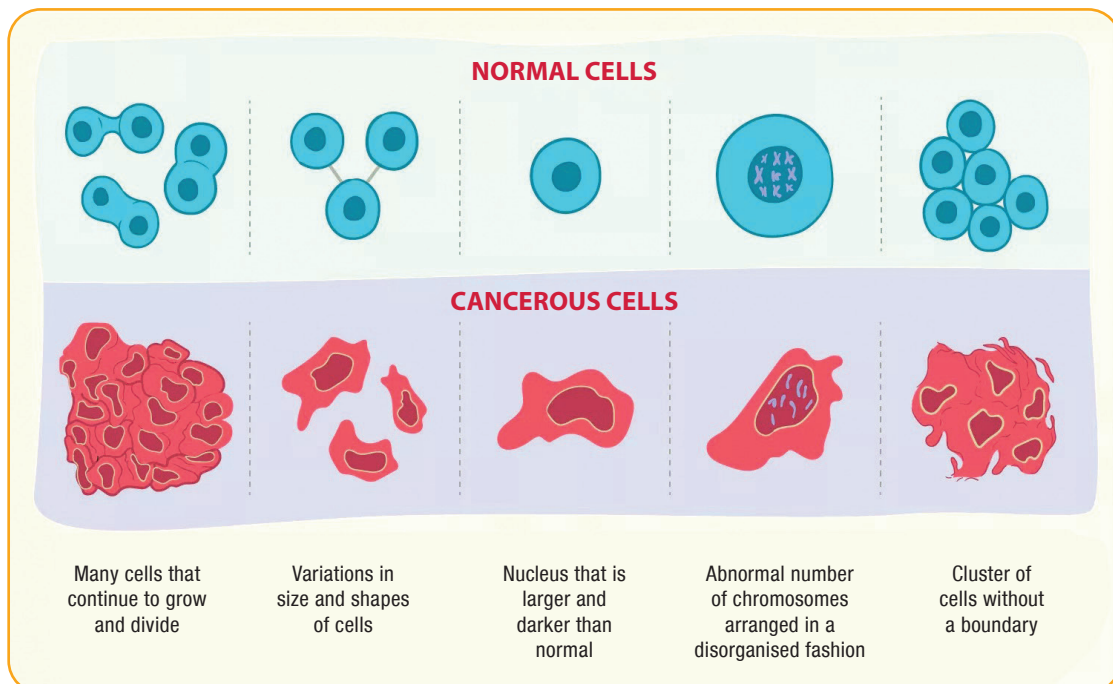
**mole:** *neo*  
**to refresh oneself:** *rigenerarsi*


**uterine fibroid:** *fibroma uterino*

## ■ Types of neoplasia



The different types of neoplasm can be: benign, pre-malignant, or cancerous.

- **Benign neoplasms.** These are non-cancerous forms, such as skin **moles**, lipomas or **uterine fibroids**.
- **Pre-malignant neoplasms.** These have the potential to become cancerous. The cells proliferate in their site of origin and do not spread, but unfortunately sometimes they can develop a carcinoma with a high risk of turning into cancer.
- **Malignant or cancerous neoplasms.** These have the following features: abnormal cell growth, the capacity to invade other tissues and to spread to distant organs via blood vessels or lymphatic channels. Cancer can take over the whole body and kill the host. **Tumours** can grow for a variety of reasons, but the process by which they grow is the same. Normally, body cells **refresh themselves** naturally by dividing. However, in the case of tumours, dead cells may remain behind and form a **growth** known as a tumour.





**1**   **Answer the questions.**



1. What is a neoplasia?
2. What types of neoplasia are there?
3. What are the main types of benign neoplasms?
4. What may sometimes happen with pre-malignant neoplasms?
5. What are the main features of a malignant neoplasm?

**2**   **Decide if the following statements are true or false. Correct the false ones.**

- |   | T                        | F                        |
|---|--------------------------|--------------------------|
| 1. Both benign and malignant tumours have the same origin.              | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Dead cells are not eliminated.                                       | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. With an imaging test it is possible to see the whole tumour.         | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. The doctor also examines the affected area.                          | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. In a biopsy, the whole tumour is examined after it has been removed. | <input type="checkbox"/> | <input type="checkbox"/> |

**3**   **Write the words for the following definitions.**

1. The sudden increase in the number or amount of cells. ....
2. An abnormal growth of tissue. ....
3. An example of benign skin growth. ....
4. Another word for tumour. ....
5. When the cells only grow and invade other tissues. ....
6. When the cells only proliferate in their place of origin. ....
7. Scans that can determine if a mass is solid or liquid. ....
8. When part of a tissue is removed and examined under a microscope. ....

**4**   **Complete the text with the missing words.**


beauty • birthmarks • body • century • face • neck • shapes • spot • stars • vogue

**Beauty marks**

A beauty mark or beauty **1** ..... is a euphemism for a type of dark facial mole, so named because such **2** ..... are sometimes considered an attractive feature. Moles of this type may also be located elsewhere on the **3** ....., but are only usually considered beauty marks if located on the face, shoulder, **4** ..... or breast.

In the 20<sup>th</sup> century, Marilyn Monroe's beauty mark generated a new **5** ..... and the supermodel Cindy Crawford's prominent mole helped revive the fashion.

False **6** ..... marks are sometimes applied to the **7** ..... as a form of make-up. Beauty marks were particularly highly regarded during the 18<sup>th</sup> **8** ..... and creating false ones became common, often in fanciful **9** ..... such as hearts or **10** .....

**5**  **Look at the picture on the previous page and compare normal and cancer cells.**

Refer to: growth, shape, number of chromosomes and boundaries between cells.



**CANCER IN ANIMALS**

Cancer is widespread in the animal kingdom. It affects molluscs, fish, reptiles, birds and mammals. Some species develop cancers similarly to humans, (e.g. skin cancer in dogs and horses), while others are affected by a rare, contagious form of the disease. At the other end of the spectrum, some species rarely get cancer; for example, elephants, which have 20 copies of a gene-suppressing cancer. Humans only have one.