

# Understanding Cancer

**A SERIES OF SIMPLE EDUCATIONAL VIDEOS  
FOR THE GENERAL PUBLIC**



***By Dr Hafsa Waseela Abbas***

[WWW.HAFSAABBAS.COM](http://WWW.HAFSAABBAS.COM)



# Understanding Cancer

**A SERIES OF SIMPLE EDUCATIONAL VIDEOS  
FOR THE GENERAL PUBLIC**

*Part 7: Diagnosis - Physical examination*

WWW.HAFSAABBAS.COM

# **What is physical examination?**

***This is the process of looking for signs to help with finding out what the problem is with the patient.***





# Medical History

At first, your doctor will want to find out more information about the patient (you).

***Family history***

***Lifestyle and Environmental factors: smoking? Alcohol? Diet?***

***Exercise? Work?***

***Prior or present illnesses: autoimmune disorders, viral infections, medications?***



# What does physical examination involve?

LOOKING  
FEELING  
TAPPING  
LISTENING

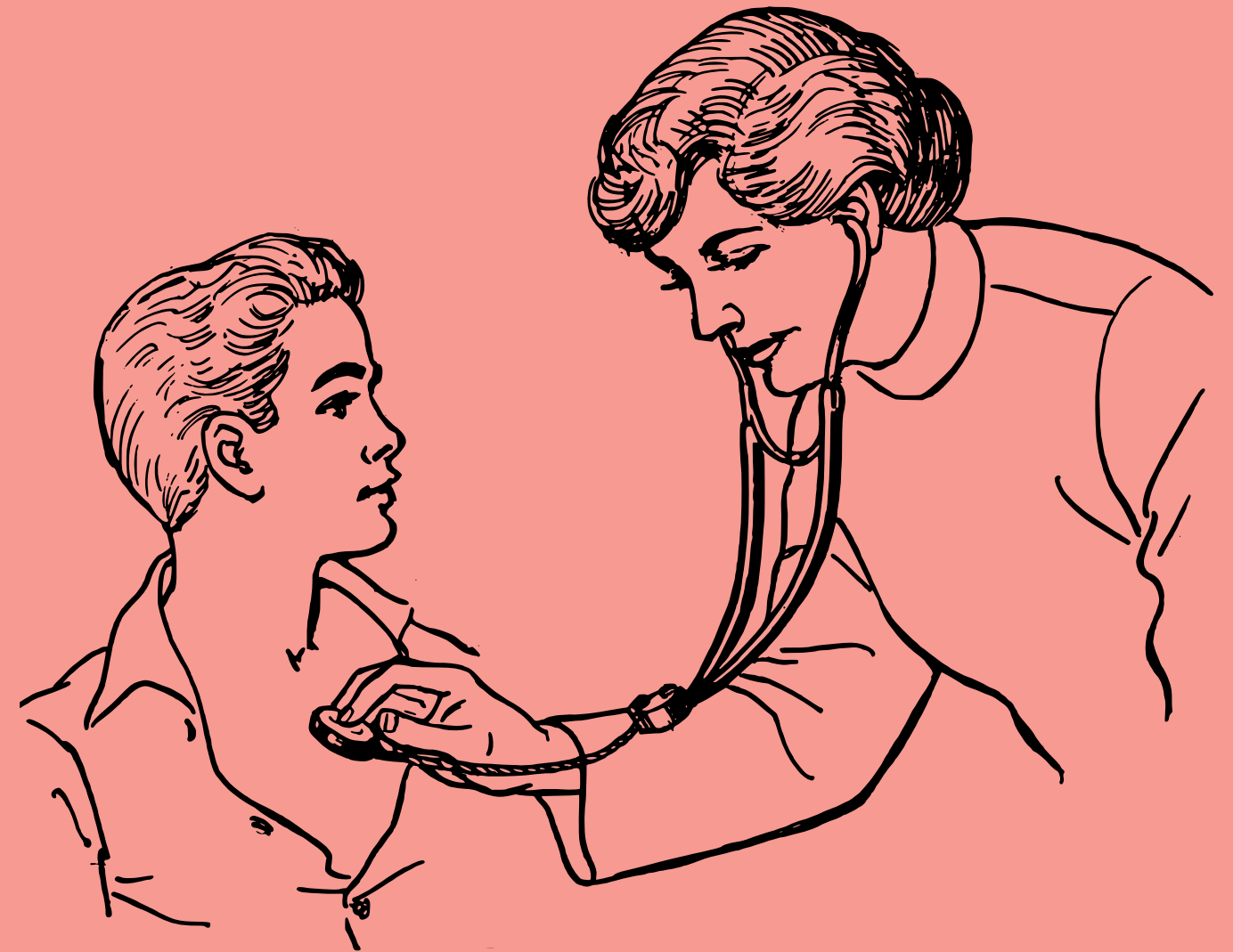


**First impressions**

**Bed-side Clues**

**Vital signs**

**Symptoms**



# **First impressions**

***As soon as the doctor sees you, he or she will look to see whether you look:***

***Comfortable?***

***Well?***

***Nourished?***

***Hydrated?***

***Carrying any medications: inhalers, GTN spray etc***



# Bed-side clues

*This normally involves a chaperone present.  
The doctor will examine the area of the issue.*

- *Skin*
- *Lymph nodes*
- *Lungs*
- *Breasts*
- *Abdomen (Stomach)*
- *Testes*
- *Prostate*
- *Rectum*
- *Vagina*





# Vital signs

*Temperature*  
*Blood pressure*  
*Pulse*

*Oxygen levels*  
*Breathing rate*  
*Blood glucose test*

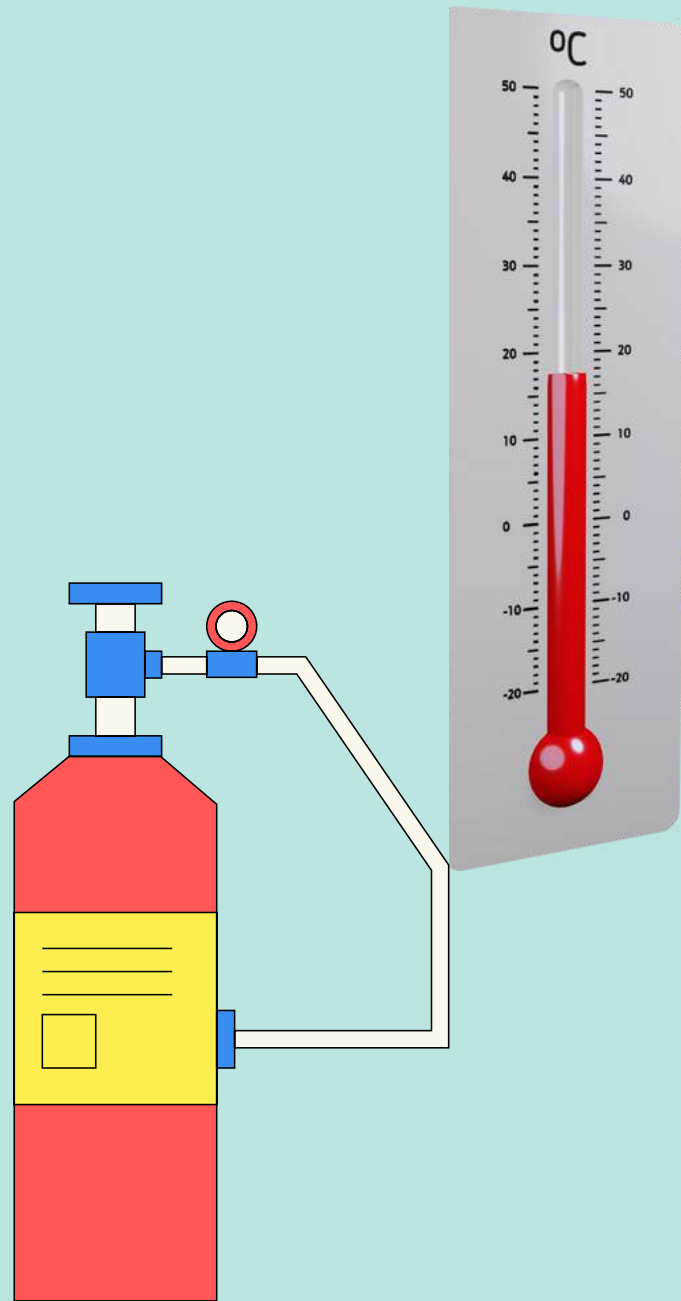


Table 1. **Vital signs: normal values in adults**

Temperature	37°C
Heart rate	60-99 beats per minute
Pulse	60-99 beats per minute
Blood pressure	120/80mmHg
Respiratory rate	12-16 breaths per minute
Oxygen saturation	95-100%
pH	7.3-7.5

**Source: Nursing Times**

Age Group	Respiratory rate (per minute)	Pulse (per minute)	Blood pressure (mm Hg)
Neonate	30-50	80-180	60/30
Infant	20-40	80-160	96/60
Toddler	20-30	80-150	98/64
School-aged child	16-24	75-110	106/68
Adolescent	12-20	50-100	114/74

**Source**  
**Higuet, A. & Hachimi-Idrissi, Said & Watelet, J-B. (2016). At risk populations: from children to the elderly. B-ENT. 12. 139-154. s**



# Some of the common symptoms

*Tiredness?*

*Fever?*

*Night sweats?*

*Weight loss?*

*Bowel movement?*

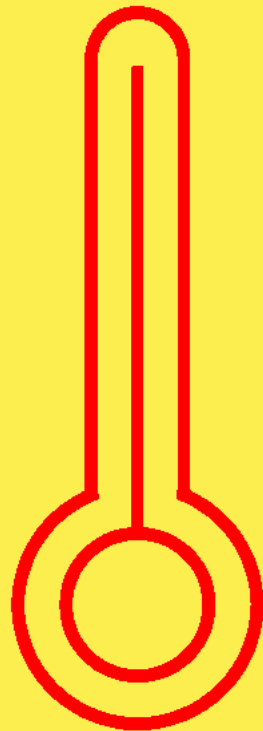
*Pain?*

*Vaginal bleeding?*

*Paleness of the skin?*

*Pigmentation of the skin?*

*Colour change of the skin (cyanosis)?*

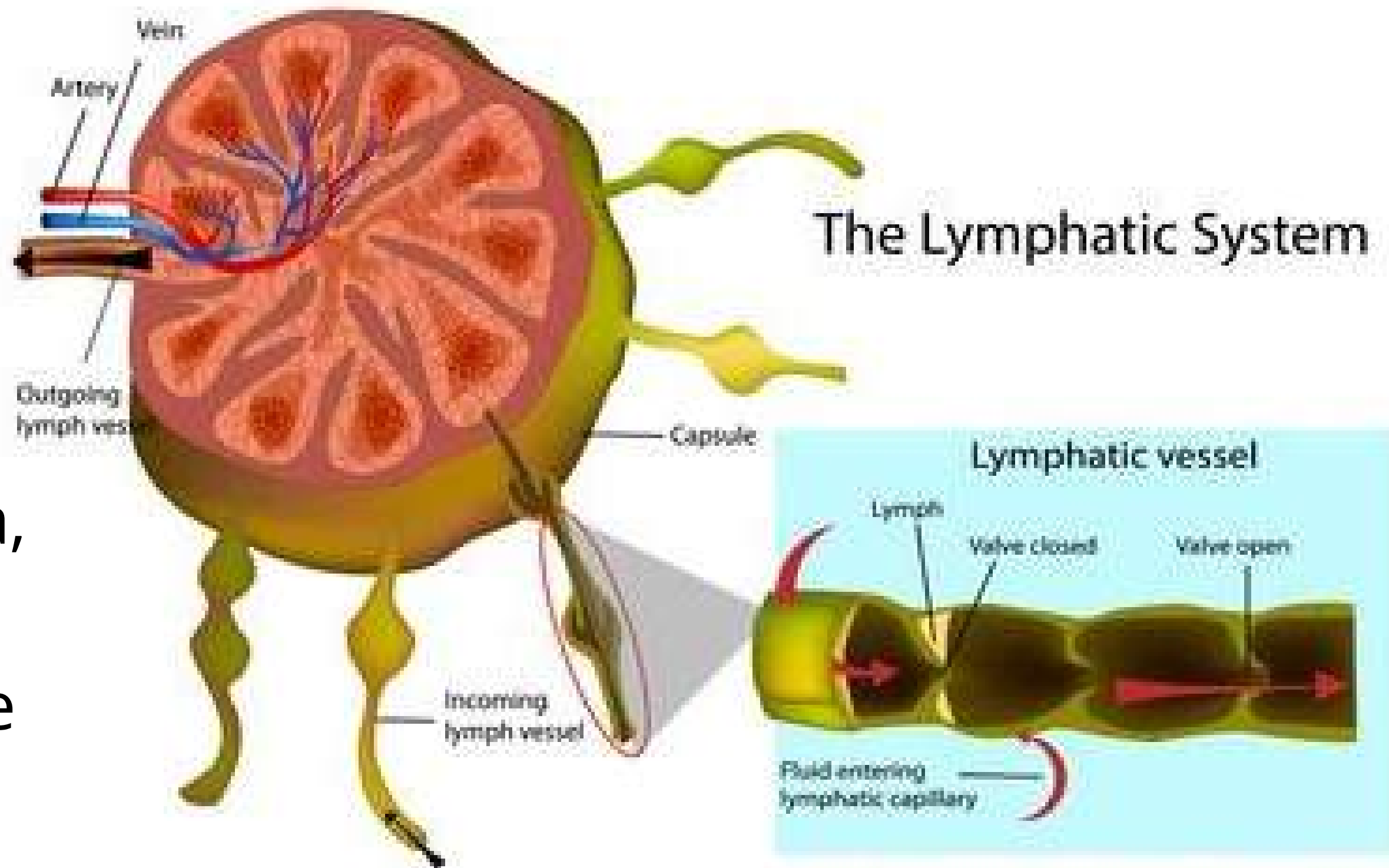


# Lymph node examination

## *What are lymph nodes?*

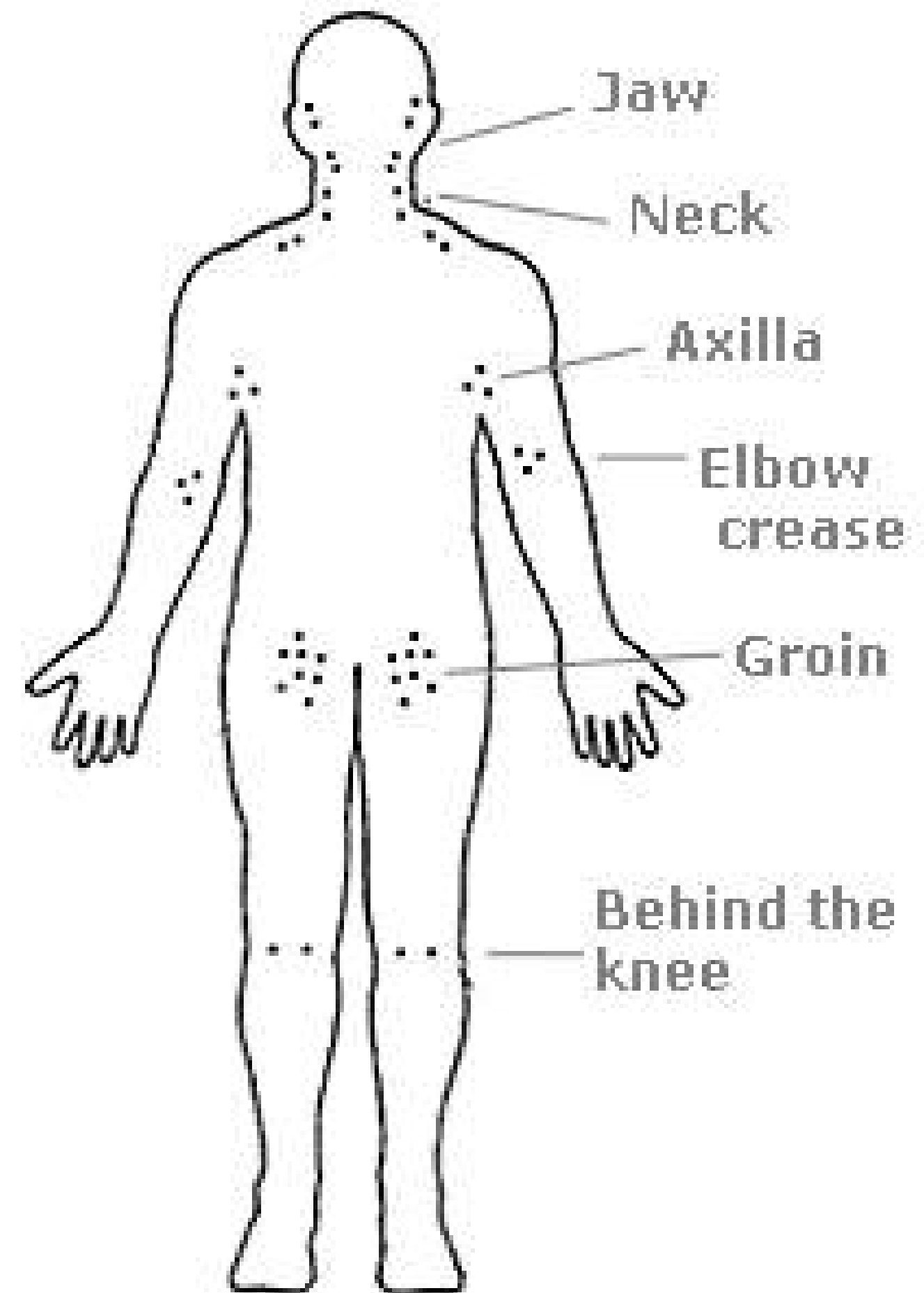
They are circular shaped balls that link together by tubes called lymphatic vessels.

They are filled with white blood cells that kill bacteria, viruses and other microorganisms that cause disease.



**Lymph nodes are found  
in the neck, armpits,  
chest and abdomen  
(stomach and  
intestines) as well as  
other areas**

Plymouth NHS trust.





# Lymph node examination

Lymph nodes are checked using finger tips on:

*Is it visible?*

*Site of node*

*Number*

*Size*

*Is it fixed in position?*

*Overlaying skin?*

*Shape*



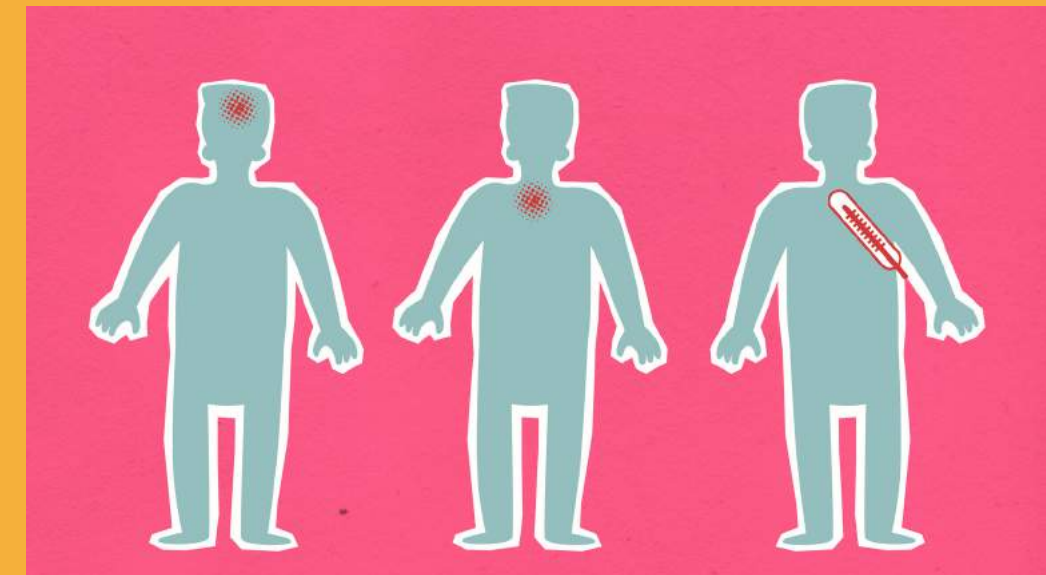
# Lymph node examination

*Lymphadenopathy is the swelling of the lymph nodes*

*It can cause large liver and spleen and is a common symptom in blood cancers such as leukaemia and lymphoma.*

# Lymph node examination

*Infection by bacteria or viruses causes:  
The skin to become red and inflamed.  
It feels soft/tender like rubber.  
Painful.*





# Lymph node examination

*Malignant tumours have hard lymph nodes that have a change in shape.*



# **Lump examination**

***Does the lump move with the skin?***

***(Epidermal/dermal)***

***Skin move with the muscle (Subcutis)***

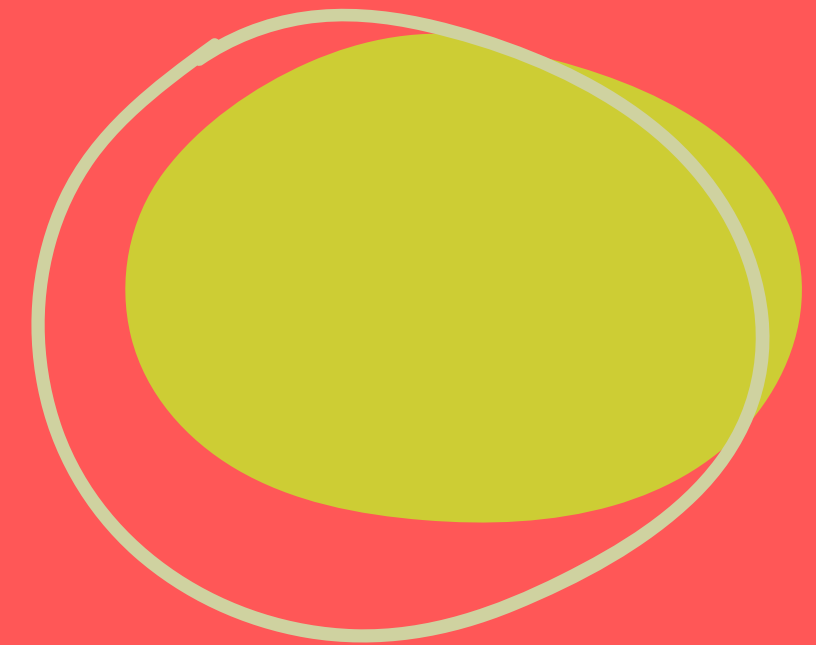
***Does the lump move with muscle (muscle/tendon)?***

***Does the lump move in one direction***

***(tendon/nerve)?***

***Pins and needle?***

***Does the lump not move? Immobile (bone)***

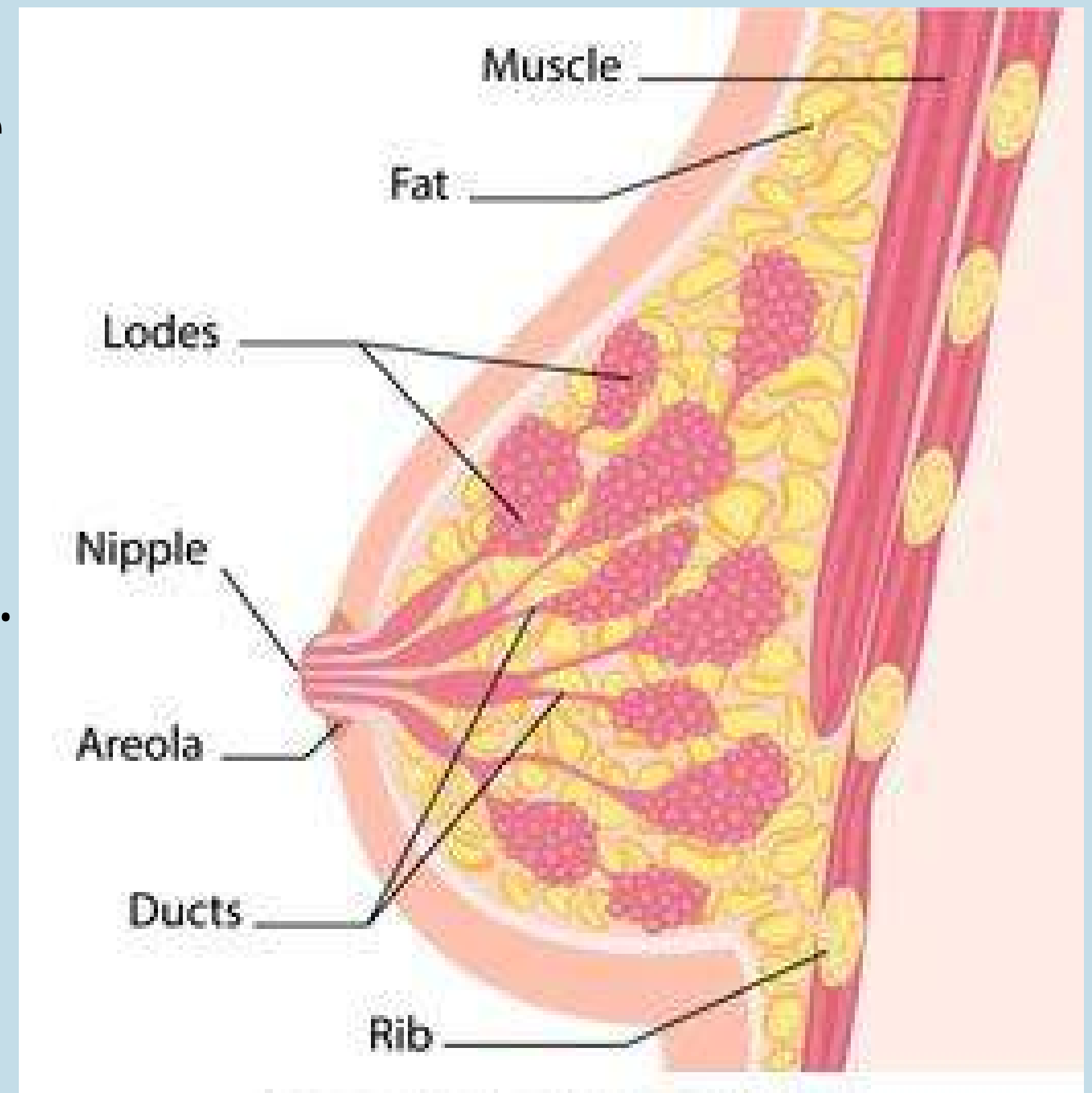


# Examination of the breast

Milk is produced in the lobes that divide into smaller sections called lobules.

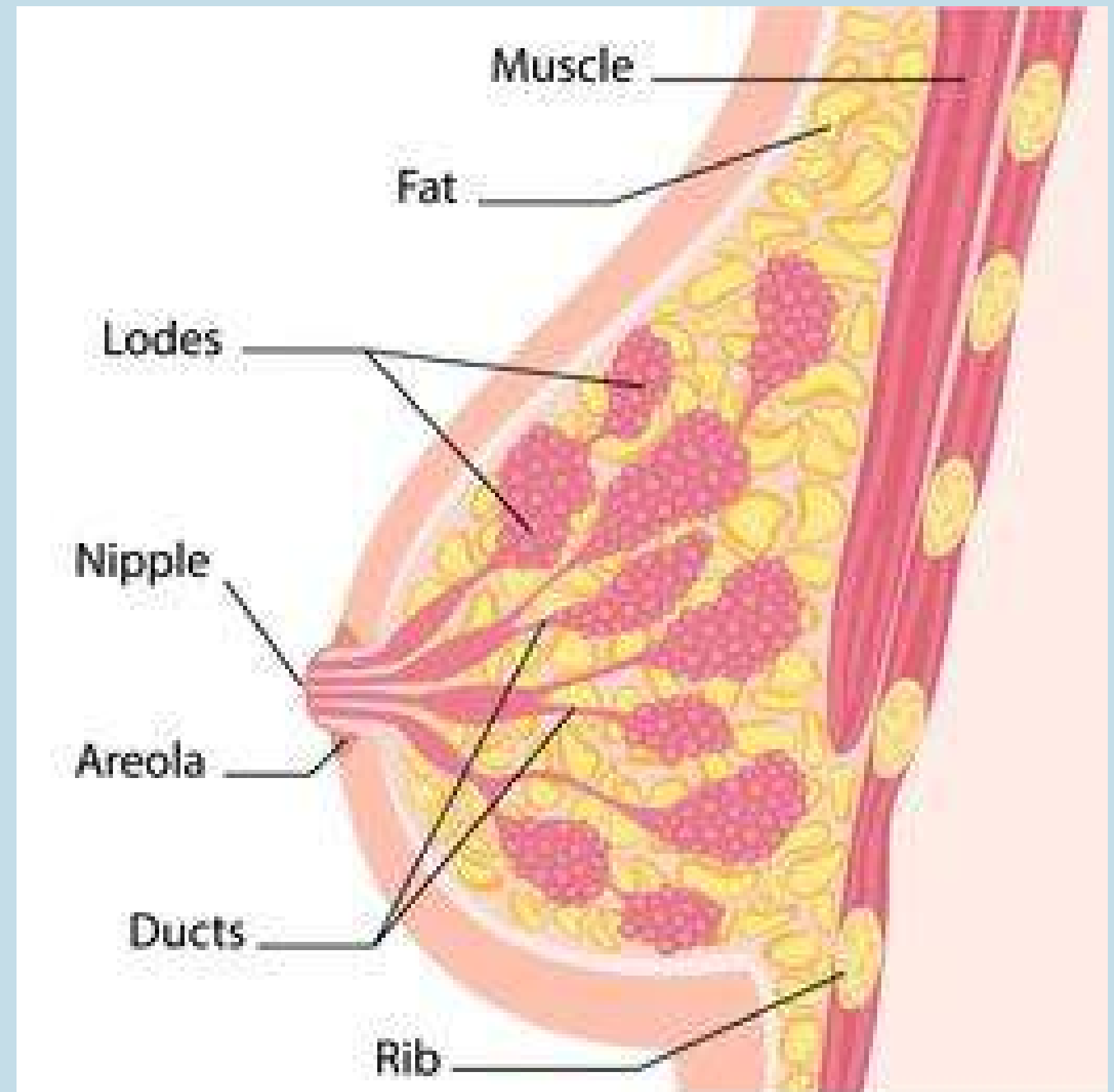
Milk travel through tiny tubes called ducts and connect to form larger ducts where they exit the skin from the nipple.

The darker area around the nipple is called the areola.



# Examination of the breast

The breast has connective tissue, ligaments, muscle, blood vessels, lymph nodes and vessels. They provide support and shape.





# **Lump in the breast?**

***When have you noticed it?***

***Size?***

***Breast pain (mastalgia)?***

***Heat? Redness?***

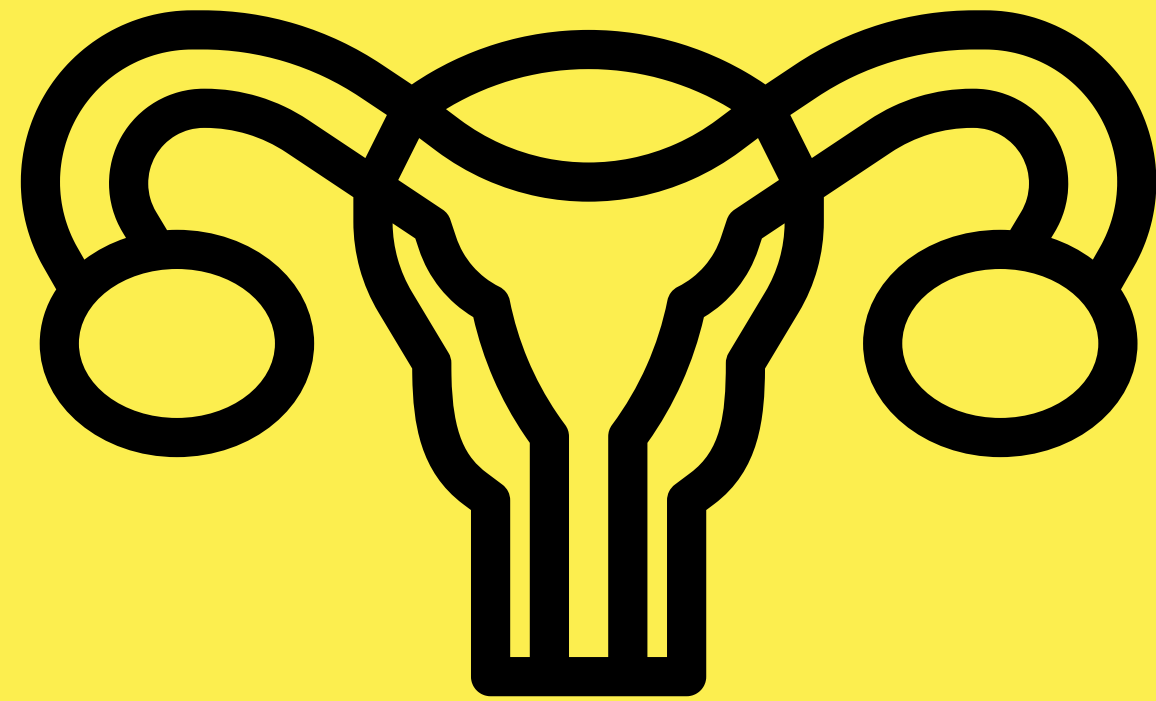
***Skin change?***

***Discharge from nipple? Clear, white? blood?***

***Has the shape changed?***

***Is it to do with the menstrual cycle (period)?***





# **Breast cancer and Period (menstruation)**

***Your doctor will also ask about your menstruation.***

***Age of first period? Regular period? How long your period is?***

***Age of menopause? Number of pregnancies? Last period?***

***Are you on hormonal therapy?***

# **This is all part of the examination to help solve the issue**

Cancer is rare under 30 years old.

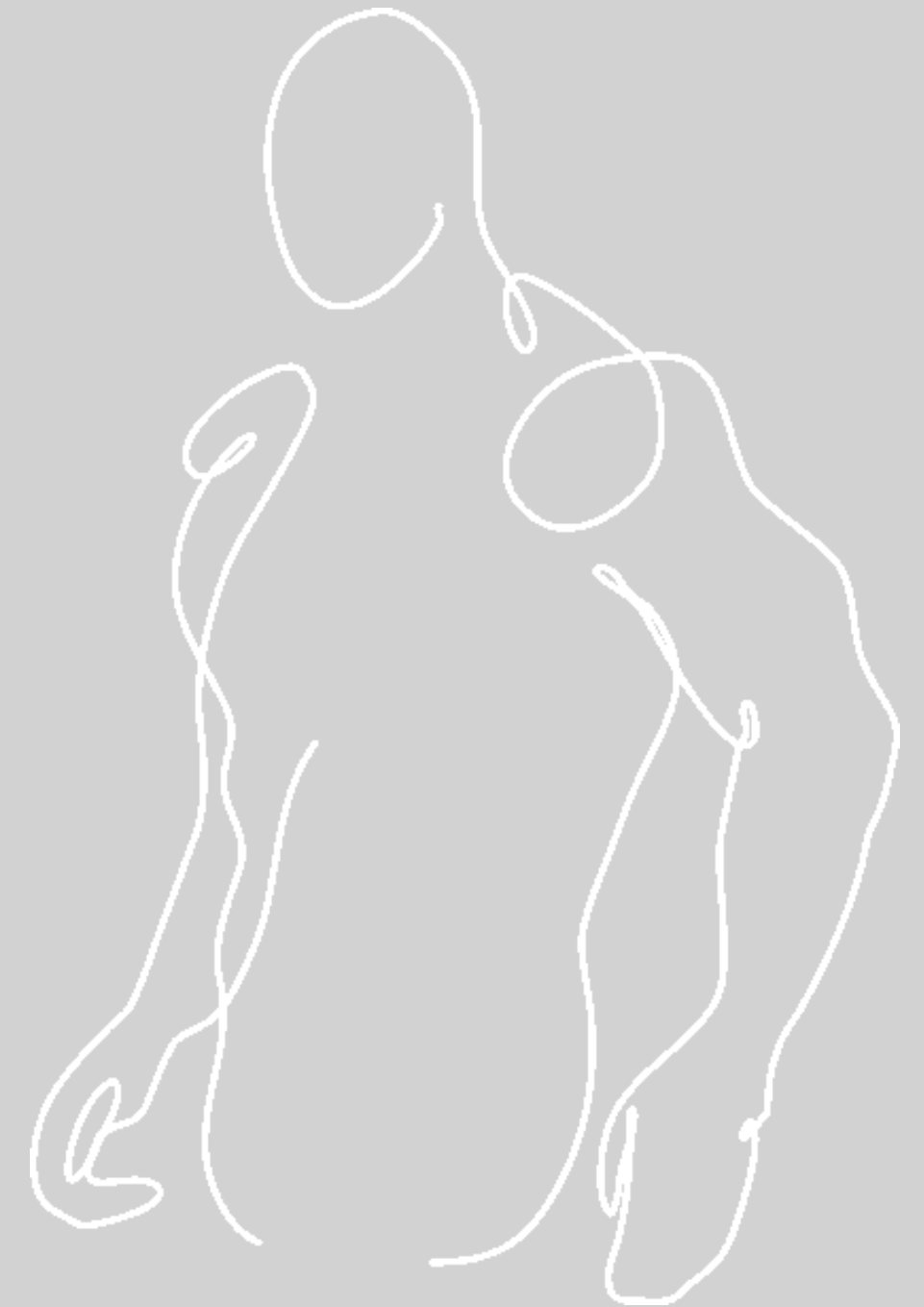
Cysts can occur between 30 and 50 years of age.

# Men and breast cancer

*Less chance of male having breast cancer.*

## *Symptoms*

- *Hard, painless lump in the skin or chest wall.*
- *Nipple discharge.*
- *Large breasts (gynaecomastia) - this may be due to fat tissue, hormonal drugs or anti-androgen drugs i.e cimetidine, spironolactone.*

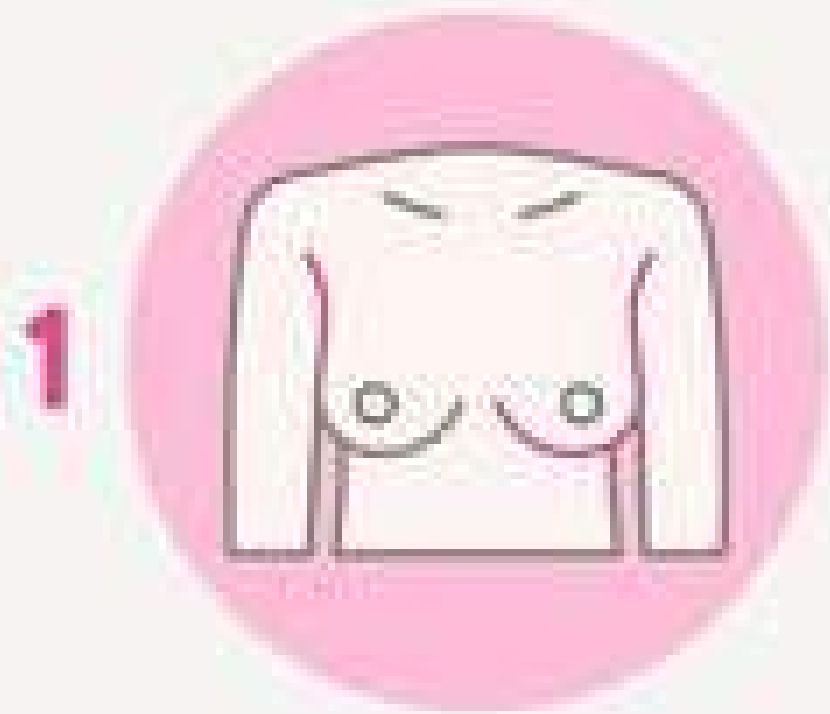


# Men and breast cancer

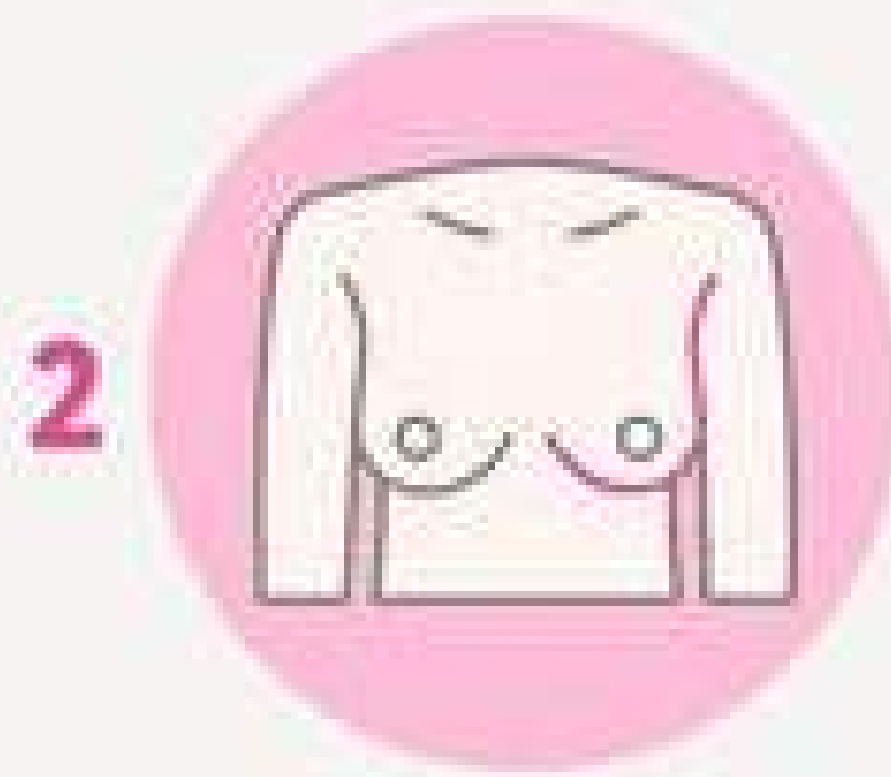


Physical examination of the  
breast and the genitals (male  
reproductive system)

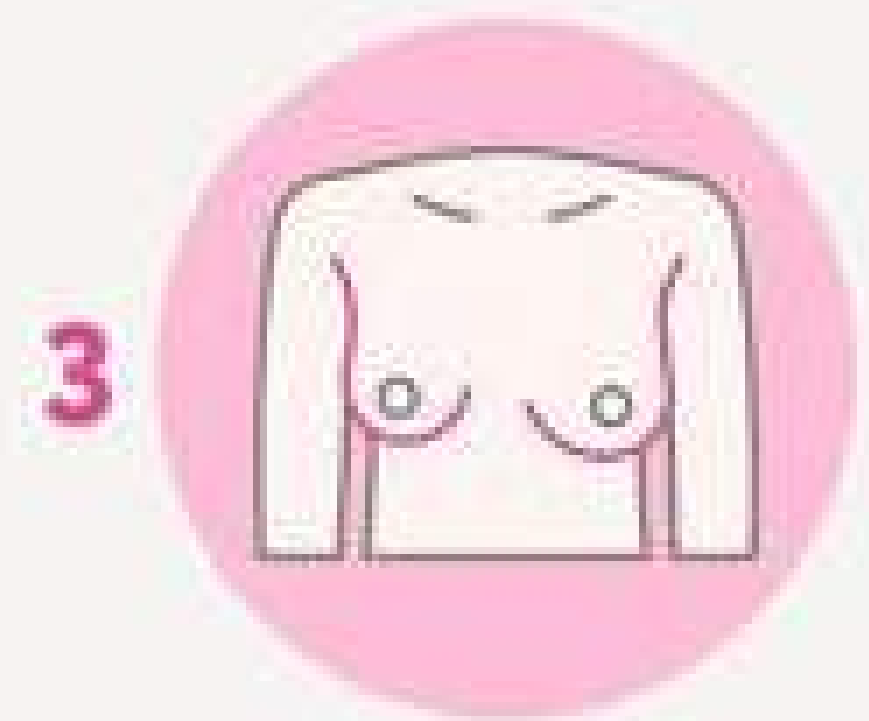




Constant **pain** in the breast  
or your armpit



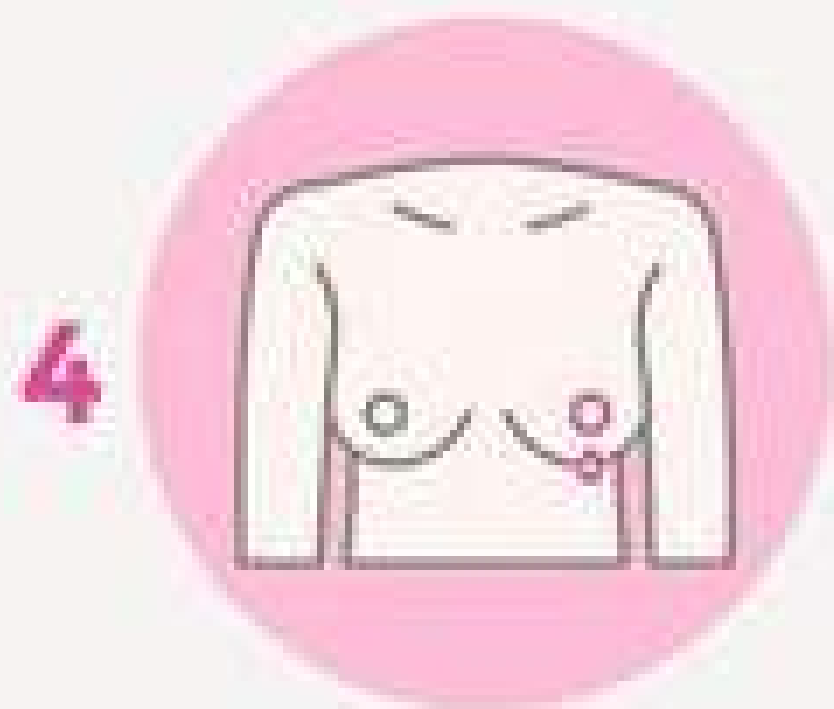
The change in **skin texture**  
(puckering or dimpling)



The difference in **shape**  
or **size**

**Once a month** **TOUCH** your breasts.  
**LOOK** for changes.  
**CHECK** with your GP.





**Discharge (liquid)** comes from the nipple without squeezing



The nipple becoming **inverted** (pulled in) or **changing its position or shape**



The **lump or thickening** that feels different from the rest of the breast tissue

**Once a month TOUCH your breasts.  
LOOK for changes.  
CHECK with your GP.**





**Once a month TOUCH your breasts.  
LOOK for changes.  
CHECK with your GP.**

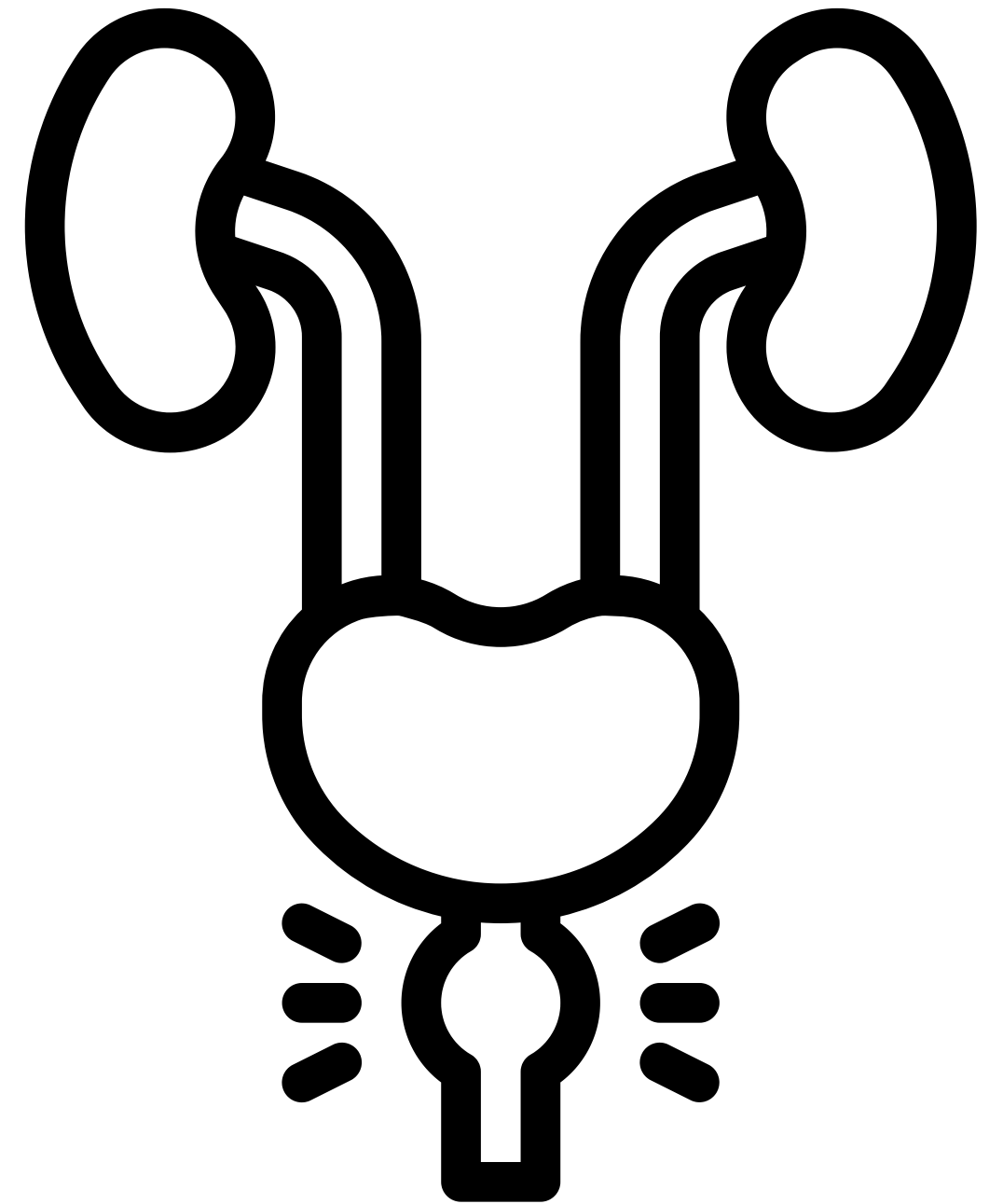


# **Prostate cancer**

**The prostate is a walnut shaped gland between the bladder and penis in front of the rectum.**

**The tube from the bladder to the penis is called urethra.**

**The prostate secretes fluid that contains sperm.**



# Prostate cancer

*Digital rectal examination (DRE) is a physical examination done after consent and explaining the process like other physical examinations.*

*This is done in the G.P or hospital in front of the chaperone.*

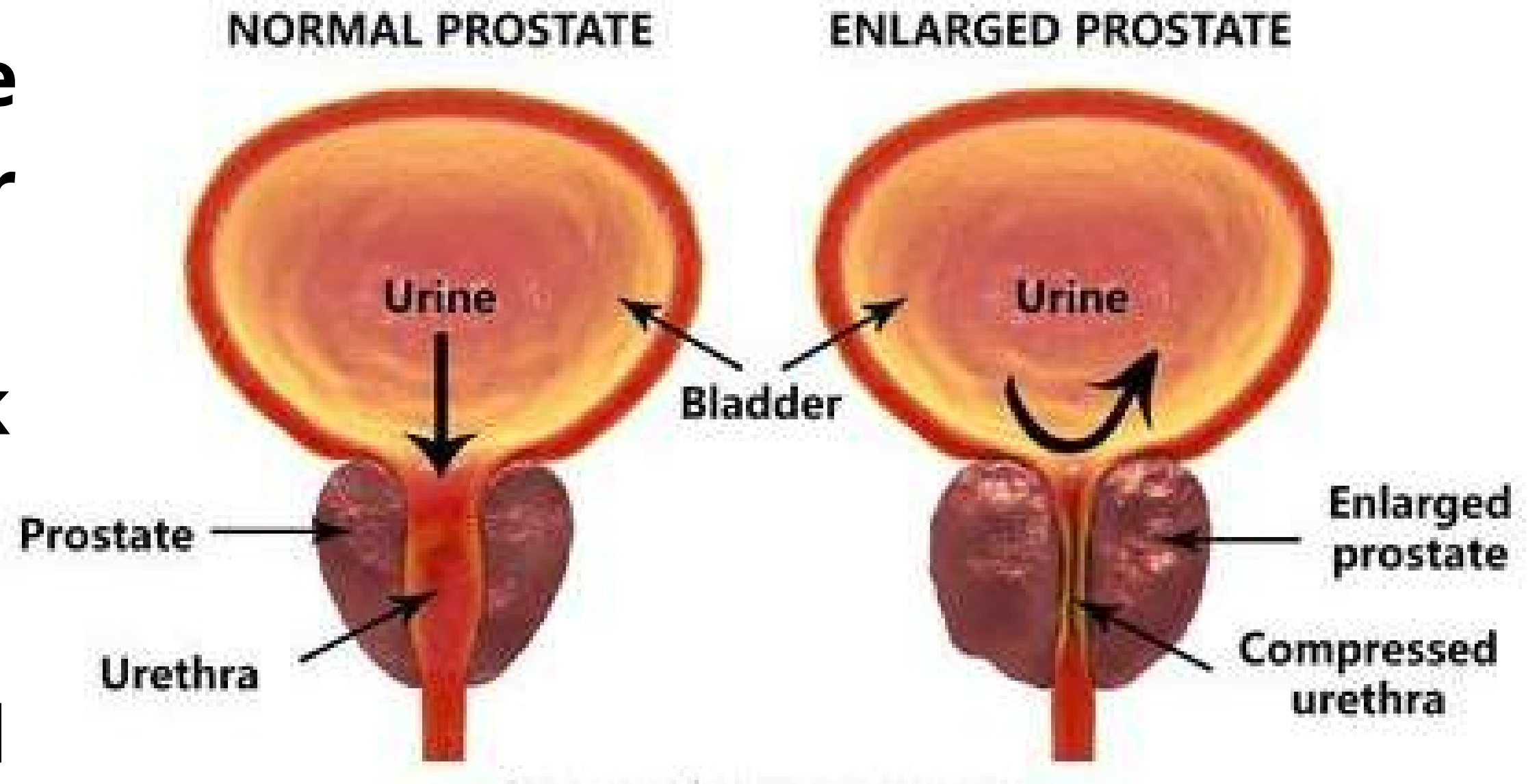
*The doctor or nurse will check outside for poo, blood and mucus before the prostate area.*





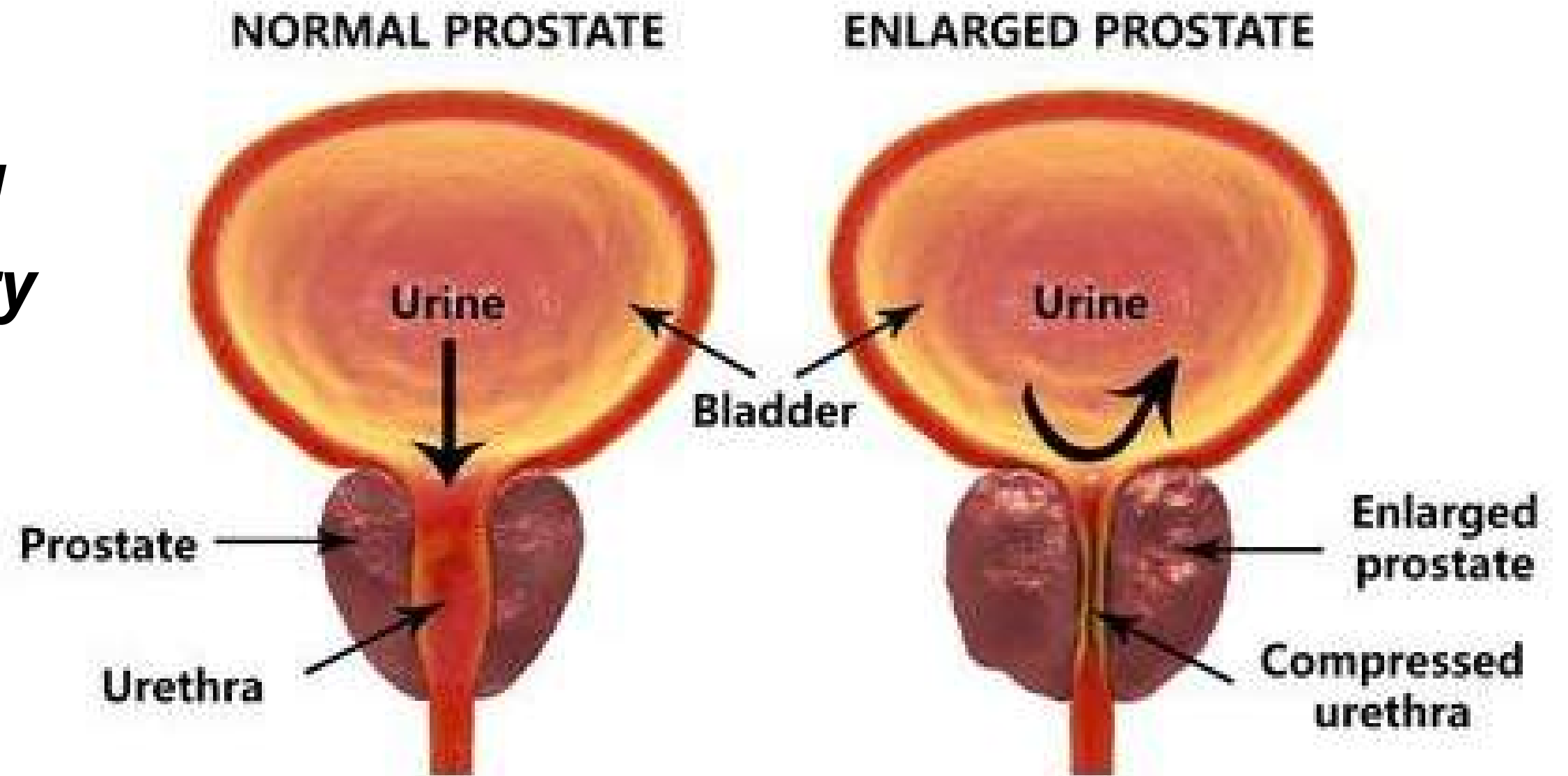
# Prostate cancer

**When looking at the prostate, the doctor will check through the wall of the back passage (rectum) for thickening, irregular shape and tenderness (soft)**



# Prostate cancer

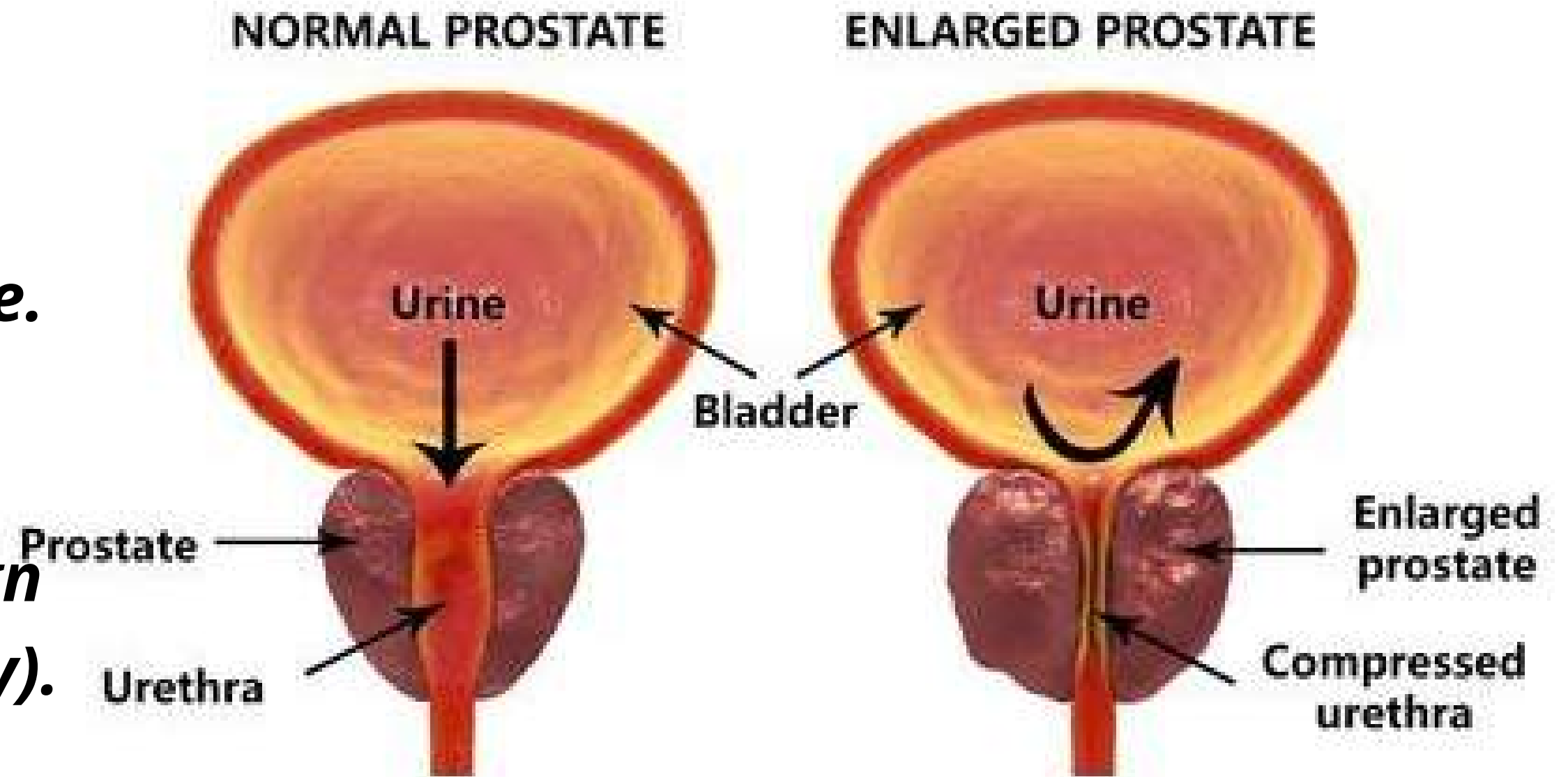
*Normal prostate will feel smooth with slight rubbery texture.  
It is 2 cm to 3 cm diameter.*



# Prostate cancer

*If prostate cancer, there would be:*

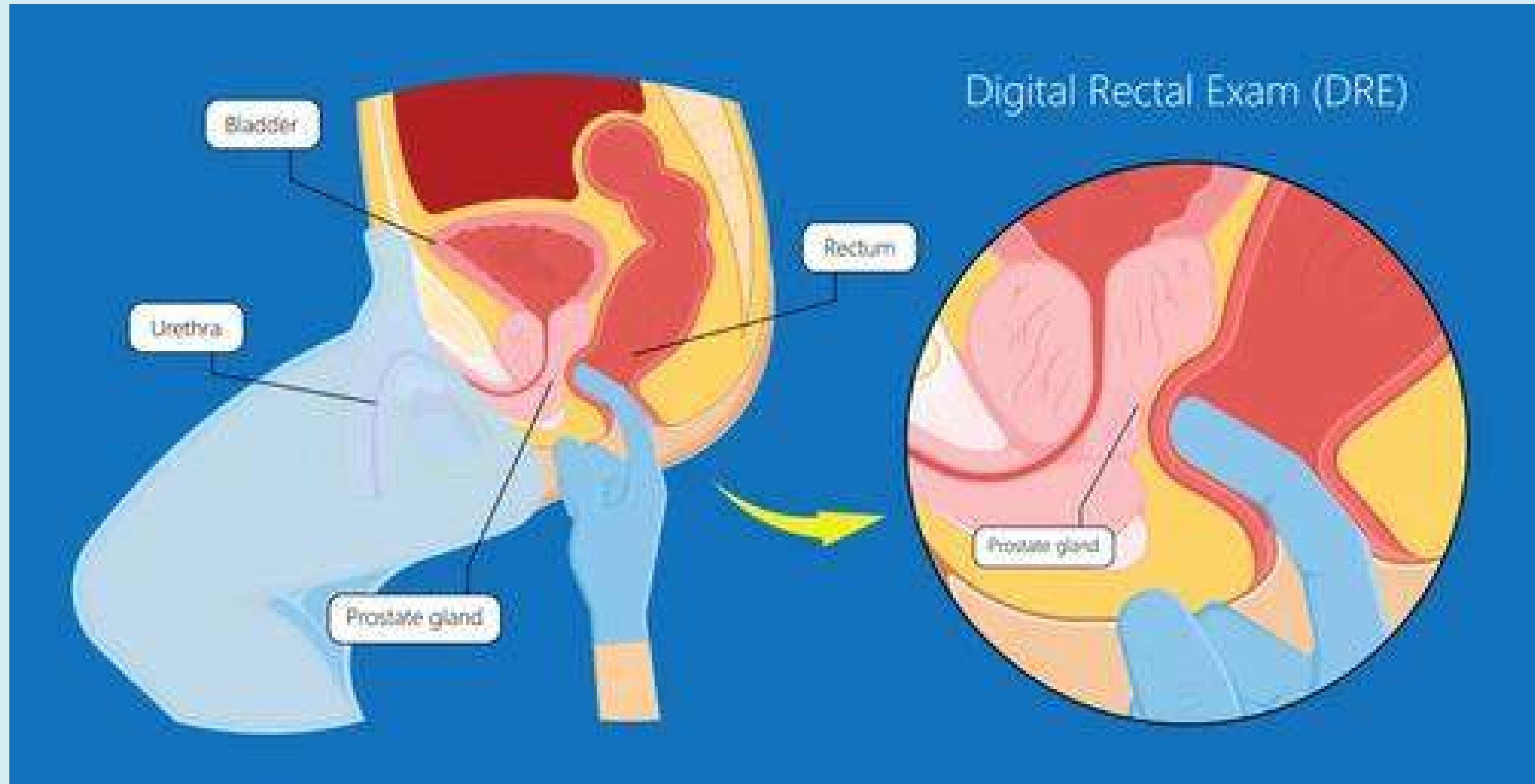
- *loss of rubber texture.*
- *hardness*
- *thickening*
- *large prostate (benign prostate hypertrophy).*



# **DRE**

- 1. Doctor or nurse will lie the patient on the side of the examination table.**
- 2. The knees are move forward to the chest.**
- 3. Using one finger that is gloved and with lubricating gel, it is added to the back passage.**
- 4. Assessment of the muscle is done by the patient squeezing the finger.**

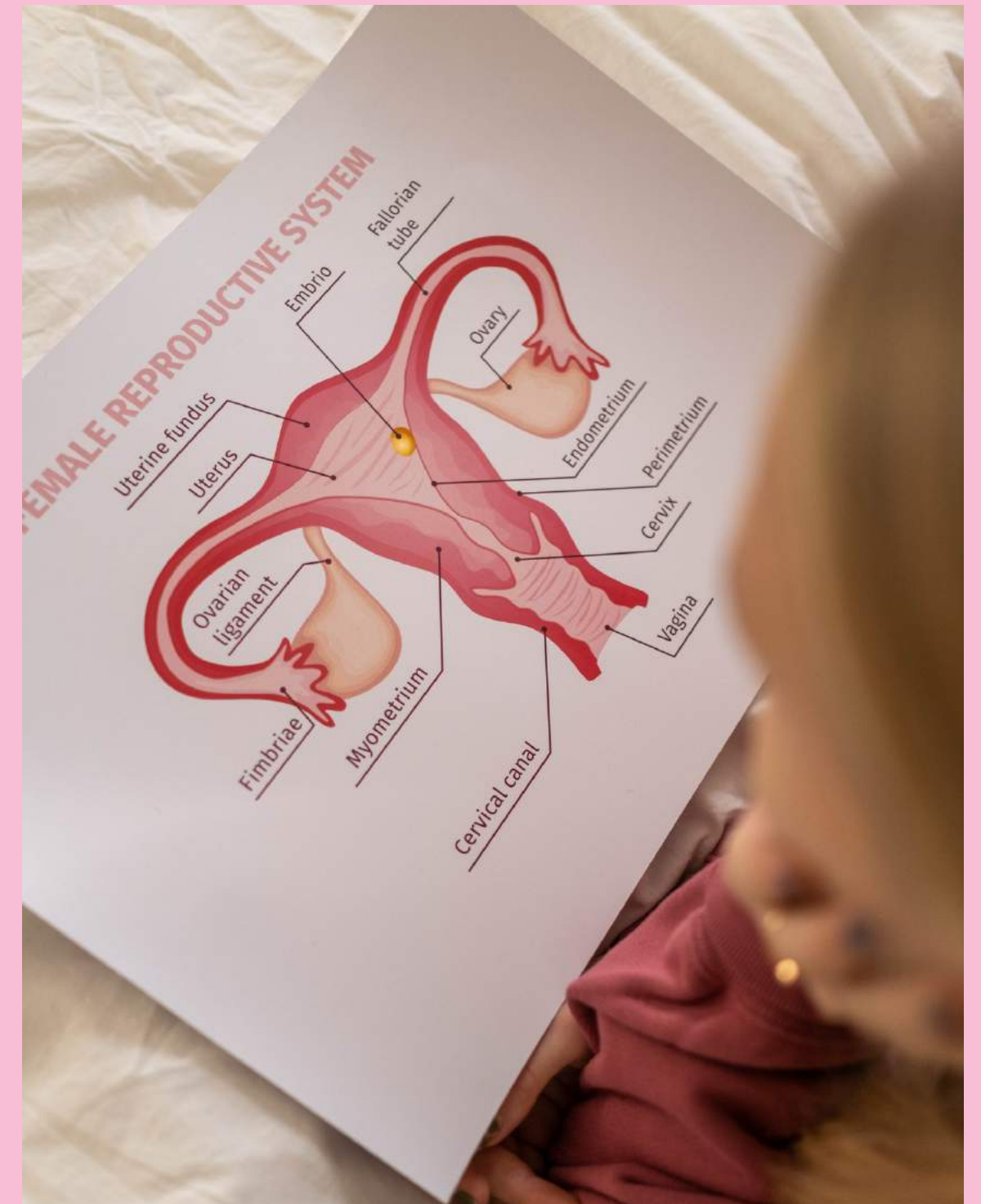
# DRE



**It is not a painful process nor take long and there is an urge to pee.**



# Physical examination of the vagina



This is done to examine for uterine cancer.

# Melanoma

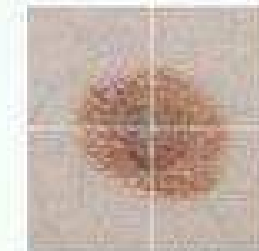
Checking the skin for size, symmetry, pattern, texture and other features is also done during physical examination for melanoma (skin cancer)

## THE ABCDE SYSTEM OF MELANOMA DETECTION

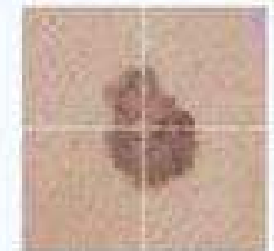
The ABCDE criteria represent a commonly used clinical guide for early diagnosis of melanoma. The following features are considered suspicious:

# A

**Asymmetry:** Moles that have asymmetrical appearance



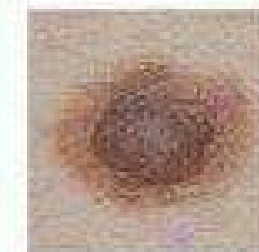
Symetrical



Asymetrical

# B

**Border:** A mole that has blurry and/or jagged edges



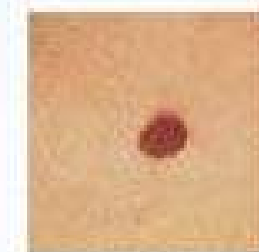
Smooth borders



Irregular borders

# C

**Color:** A mole that has more than one colour



Single color



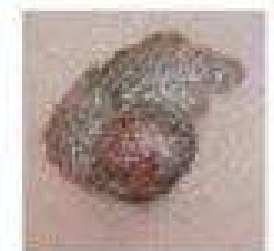
Multicolor

# D

**Diameter:** Moles with a diameter larger than a pencil eraser (6 mm or 1/4 inch)



Smaller than 6mm/0.2in



Bigger than 6mm/0.2in

# E

**Evolution:** A mole that has gone through sudden changes in size, shape or colour



No changes



Some changes

# Skin examination for melanoma

*Glasgow 7 point checklist for the skin examination is commonly used.*

	Clinical features	Score
Major features	<ul style="list-style-type: none"><li>• Change in size</li><li>• Irregular shape</li><li>• Irregular colour</li></ul>	2 for each
Minor features	<ul style="list-style-type: none"><li>• Largest diameter 7 mm or more</li><li>• Inflammation</li><li>• Oozing</li><li>• Change in sensation</li></ul>	1 for each
A score of 3 or more is regarded as suspicious		

**Overall, there are many forms of physical examinations and this is based on the symptoms and history of the patient.**





# Understanding Cancer

**A SERIES OF SIMPLE EDUCATIONAL VIDEOS  
FOR THE GENERAL PUBLIC**

*Part 8: Diagnosis - Blood test*

**UPCOMING VIDEO RELEASING SOON!**

[WWW.HAFSAABBAS.COM](http://WWW.HAFSAABBAS.COM)



# Acknowledgements

**Oxford Handbook of Clinical Examination and Practical Skills.**

**Canva**

**WebMd.com**

**University Hospitals Plymouth NHS Trust**

**Prostate Cancer UK**

**Shutterstock images**

**Nursing Times**

**Higuet, A. & Hachimi-Idrissi, Said & Watelet, J-B. (2016). At risk populations: from children to the elderly. B-ENT. 12. 139-154.**

**WWW.HAFSAABBAS.COM**

***Thank  
you!***