

CARCINOMA BREAST

Risk Factors and Preventive/Screening Measures

QUESTION

Risk factors and preventive measures of carcinoma breast.

- a. Risk factors — 2 marks
- b. Preventive/screening measures — 2 marks

ANSWER

a. Risk Factors

The established risk factors for **breast cancer** include the following:

Age and Gender:

Female gender is the strongest risk factor. It is uncommon below the age of 35, with incidence increasing rapidly between the ages of 35 and 50, and showing a secondary rise in frequency after the age of 65.

Family History:

The risk is high in those with a positive family history of breast cancer, especially if a mother or sister developed the disease when premenopausal.

Parity:

Unmarried women, **nulliparous women**, and women who delay their first pregnancy to their late thirties are at a higher risk. An early, full-term pregnancy has a protective effect.

Age at Menarche and Menopause:

Early menarche and **late menopause** are established risk factors. Forty or more years of menstruation doubles the risk of breast cancer as compared with 30 years.

Hormonal Factors:

Elevated levels of **oestrogen** and **progesterone** play a crucial role. Prolonged use of **oral contraceptive pills** before the first pregnancy or before the age of 25 may also increase the risk in younger women.

Prior Breast Biopsy:

A history of a prior breast biopsy for benign breast diseases (e.g., fibroadenoma, fibrocystic disease) is associated with an increased risk.

Diet and Lifestyle:

Diets linked with a **high fat diet** and **obesity** are significant aetiological factors.

Socio-Economic Status:

It is more common in **higher socio-economic groups**, which is explained by the risk factor of higher age at first birth.

Radiation:

An increased incidence has been observed in women exposed to **radiation**.

b. Preventive/Screening Measures

1. Primary Prevention (Behavioural Choices and Interventions)

- Encouraging **prolonged breastfeeding**.
- Maintaining **weight control** and engaging in **regular physical activity**.
- Avoidance of harmful use of alcohol and exposure to tobacco smoke.
- Avoidance of prolonged use of hormones and excessive radiation exposure.

2. Secondary Prevention (Screening Measures)

There is evidence that screening for breast cancer has a favourable effect on mortality. The basic screening techniques include:

Breast Self-Examination (BSE):

All women should be encouraged to perform **BSE** regularly. It is a useful adjuvant to early case detection and the only feasible approach for wide population coverage in many countries.

Palpation by a Physician:

Routine clinical breast examination during health visits.

Mammography:

It is the most **sensitive and specific** test for detecting small tumours that are sometimes missed on palpation. However, medical opinion is against routine mammography in very young women; those under 35 years of age should not have X-rays unless they are symptomatic or have a family history of early-onset breast cancer.

Thermography:

It has the advantage that the patient is not exposed to radiation, though it is unreliable for large fatty breasts.

Primary Prevention

Behavioural Choices and Interventions

Secondary Prevention

Screening Measures