A case of multiple bilateral accessory nipples (polythelia) in a male

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Abstract

Polythelia is a condition in which accessory nipples are formed along the milk line. A 29 year old male was seen with multiple bilateral accessory nipples during routine abdominal examination. There were no other signs and symptoms of any other problem related to the presence of the accessory nipples.

Keywords: Male; polythelia.

Supernumerary nipples are a form of congenital anomaly. Also known as 'Polythelia' it is a condition where the accessory nipples have formed due to the persistence of fragments of the mammary line. Accessory nipples may develop anywhere along the original mammary line.

Development of breast

The breasts are developmentally derived from modified sweat glands. In humans and other mammals, the breasts form a secondary sexual feature of females and are the source of nutrition for the neonate. They are present in a rudimentary form in males. In females major growth and differentiation of breast tissue occurs after puberty to give rise to a complex structure, predominantly composed of adipose tissue surrounding epithelial secretory tissue.

Prenatal development is similar in both sexes with the epithelial mammary bud at a gestational age of 25 days. The first indication of mammary glands is found in the form of a band like thickening of the epidermis, the mammary line/ridge. In a 7-week embryo, this line extends on each side of the body from the base of the forelimb to the region of the hind limb (Fig. 1). In the region where the mammary gland is to form, a thickened mass of epidermal cells is seen projecting into the dermis. From this thickened mass, 16-20 outgrowths arise, and grow into the surrounding dermis. Usually invagination of the thoracic mammary bud into the mesenchyme occurs by day 49, with the involution of the rest of the mammary line. Nipple formation begins at the day 56 and primitive ducts develop at 84 days with canalization occurring at about 150th day.

Accessory mammary tissue, as already mentioned, may develop in adults anywhere along the milk line (polythelia) usually in the thoracic region (90%) but also occasionally in the axillary (5%) or the abdominal region (5%).

Case report

A 29 year old male reported to the dispensary (attached to Nepalgunj Medical College, Chisapani) with history of nausea and indigestion of food. During the examination of the abdomen, these accessory nipples were detected. In the case, (as seen in the photographs), there were accessory nipples bilaterally. Only one amongst these was developed. The rest resembled dark moles. Their location in milkline was suggestive of their being accessory nipples. The person had no complaints pertaining to these nipples and reported that these were present since birth. There were no signs suggestive of gynaecomastia in any of the breasts. The other secondary sexual characters were also found to be normally developed.

The case on later laboratory investigations was found to have developed jaundice and was managed accordingly.

Discussion

True polythelia refers to more than one nipple serving a single breast and is very rare. Polythelia of this kind is not that rare. When the nipples are rudimentary as is usually the case, they be mistaken for a mole. Sometimes the breast tissue may develop without even the rudimentary nipple. In such cases this may be confused with a lipoma.
None of the literature referred to mentioned an increased incidence of carcinoma or other disorders specific to
the presence of accessory nipple. It was however mentioned that the accessory nipples are removed only for
cosmetic reasons.

References