A CASE OF INAPPROPRIATE GALACTORRHOEA FOLLOWING CHOLECYSTECTOMY

(A Case Report)

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Introduction

The onset of inappropriate galactorrhoea in the early postoperative period after surgery on chest wall or upper abdomen can be unexpected and embarrassing both for the patient and the surgeon. It is a rare phenomena but when it occurs it usually follows incision on the lateral thoracic wall. Rarely it has been reported following incision on the abdominal wall. It is not accompanied by amenorrhoea. A case of galactorrhoea following cholecystectomy is reported.

Case Report

A 32-year-old multiparous woman underwent cholecystectomy through right subcostal transverse incision in November 1993. Postoperative period was uneventful and she was discharged from hospital on the 6th postoperative day. Patient reported back after 10 days with complaints of milky discharge from both breasts. She was not on any drugs and was in good health prior to surgery. Menarche had occurred at the age of 12 years and she had regular menstrual cycles. Her last menstrual period was one week prior to surgery. She was para 2 and last child birth was in September 1989. She had successfully breast-fed both the children for 6 months. Except for copious milky discharge from breasts no abnormality was detected on systemic examination. The cholecystectomy scar had healed well.

Routine blood and urine analysis were within normal limits. Pregnancy test was negative. Sonography of pelvis and abdomen did not reveal any abnormality. Chest radiography was normal. Serum prolactin was 15 mg/mL. As clinical examination, serum prolactin, thyroid hormone assay (T3, T4, TSH) and skull radiography for sella turcica were normal the galactorrhoea was considered to be due to stimulation of nerve endings secondary to local trauma of cholecystectomy. Patient was reassured. The galactorrhoea progressively regressed and subsided

completely within 6 months.

Discussion

Lactation occurs as a result of sequence of hormonal events occurring during pregnancy and puerperium. Interaction of oestrogens, corticosteroids and growth hormone leads to growth of duct. Alveolar lobules develop under influence of progesterone and prolactin. After delivery the milk secretion occurs due to withdrawal of oestrogen and progesterone and continuous secretion of prolactin. Once lactation is established it is maintained through afferent stimuli from the breast via intercostal nerves T2-T6. These nerve stimuli lead to lactation by reducing normal hypothalamic inhibitory control of prolactin release from anterior pituitary.

Non-puerperal lactation can occur due to hypothalamic lesions, pituitary tumours, drugs like phenothiazine, methyl dopa, meprobamate and also due to persistent stimulation of the afferent neural pathway of T2-T6 caused by lesions like chest wall burns, herpes zoster, and incisions on chest wall [1-3].

Galactorrhoea can also occur following surgery like thoracotomy, mastectomy, cholecystectomy and laparotomy [4,5]. Galactorrhoea as a result of chest wall injuries and incision are self-limiting and not due to sustained hyperprolactinaemia. In these cases sudden peaks of prolactin are induced by stress of surgery like cholecystectomy [6] and its likelihood may be greater after procedures that include oophorectomy [7] due to sudden with-

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drawal of oestrogen and progesterone in a reproductive age group patient. In the present case the serum prolactin was in normal range which can be explained due to stimulation of intercostal nerve T2-T6 which can initiate lactation despite the presence of normal prolactin level [8,9]. However, transient hyperprolactinemia, excessive sensitivity of the breast tissue to prolactin due to increased receptors and of heterogeneity of prolactin molecules cannot be ruled out.

Duration of postoperative lactation varies from a few weeks to several months. The usual measures aimed at suppression of lactation like bromocriptine are of limited benefit. Intercostal nerve block has been attempted with temporary but dramatic relief of symptoms. The present case was managed successfully by a conservative approach.

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