INTRODUCTION

Nipple discharge is the third most common breast complaint for which women seek medical attention, after lumps and breast pain. A woman's breasts have some degree of fluid secretion activity throughout most of the adult life. The difference between lactating and non-lactating breasts is mainly in the degree or amount of secretion and to a smaller degree in the chemical composition of the fluid (O'Grady et al, 2000).

Abnormal nipple discharge may be described as any discharge not associated with lactation; however, nipple discharge is of concern if it is:

- *bloody or watery (serous) with a red, pink, or brown color.*
- *sticky and clear in color or brown to black in color (opalescent).*
- *appears spontaneously without squeezing the nipple.*
- *persistent.*
- *unilateral.*
- *confined to one duct.*
- *associated with a breast lump.*
- *a fluid other than breast milk*

while physiologic discharges are characterized by:

- *discharge appears only with compression.*
- *multiple duct involvement.*
- *usually bilateral.*

So, the first step in the evaluation of a nipple discharge is to determine whether the discharge is pathologic or physiologic (O'Grady et al, 2000).

A nipple discharge can be characterized as physiologic or pathologic based on the findings of the history and physical examination (Morrow, 2000).

Nipple discharge is most often due to a benign process. This common breast problem has been reported in 10 to 15 percent of women with benign breast disease and in 2.5 to 3 percent of women with breast cancer. However, using an aspiration pump, secretions can be obtained from 50 to 80 percent of women without known breast disease (Dawes et al, 1998).

However, nipple discharge is considered as a complex diagnostic challenge for the clinician because a variety of diseases (such as intraductal papillomas, mammary duct ectasia, breast cancer, pituitary adenomas, breast abscesses/infections, etc.) can manifest as nipple discharge (Sakorafas, 2001).

The importance of nipple discharge for both the patient and the physician is that nipple discharge often raises concern for the possibility of two uncommon but serious conditions breast cancer and a pituitary tumor. This concern may result in a battery of diagnostic tests, including endocrinologic studies, such as serum prolactin and thyroid function tests, and radiographic imaging, such as mammography, breast ultrasonography, and head CT or MRI imaging. When used indiscriminately, these tests not only have an extremely low yield but often result in false-positive findings, which lead to anxiety and further evaluation or intervention (Falkenberry, 2002).

So, the goal in evaluating nipple discharge should be to make an accurate diagnosis that results in appropriate treatment and reassurance (Falkenberry, 2002).

Evaluation and management of patients with nipple discharge aims to identify carcinoma when present, and in benign cases, stop the discharge when bothersome (King et al, 2000).