

# CHAPTER I

## INTRODUCTION

### **Statement and Significance of the Problem**

Lobular carcinoma in situ (LCIS) was first characterized as a distinct entity by Foote and Stewart in 1941(1). Clinically, LCIS is often multicentric and frequently bilateral. Therefore, in the past, bilateral mastectomies are often performed for the treatment (2).

LCIS has been suggested to be a risk factor rather than a true precursor lesion(2). It was also noted that invasive ductal carcinoma was the most common type of carcinoma to develop after LCIS (3). However, recent study has demonstrated a clonal relationship between most of the paired lesions (LCIS and synchronous invasive lobular carcinoma), suggesting a precursor-product relation between LCIS and invasive lobular carcinoma(4). Though, it appears that progression of LCIS to the invasive lobular carcinoma is less frequent and that on average it takes longer than in the case for intraductal carcinoma (3).

With the recognition of LCIS variants including classical (CLCIS), pleomorphic (PLCIS) and necrotic (NLCIS) (2),the management of Lobular neoplasm(LN) is still evolving and there are no comprehensive guidelines for management of these lesions. Although, the distinction between PLCIS and high-grade DCIS can be difficult by histologic alone, the E-cadherin immunostaining is very useful since absence of reactivity is diagnostic of LCIS (5-7) both for classic and their variants (2). Among LCIS, recent studies suggested the PLCIS has a more aggressive phenotype than CLCIS (2, 8, 9).Thus, it is important to understand natural history and to define the most appropriate management of those LCIS lesions which seemed to be different among LCIS group and certainly between LCIS and DCIS. There have been only few studies of lobular neoplasm in Thailand, thus it is a need to perform the study of LCIS lesion to obtain information of this lesion in our hospital as a start point for future further study.

**Objectives**

1. To evaluate the prevalence of lobular carcinoma in situ and its variants of breast cancer in Maharaj Nakorn Chiangmai Hospital from January 2006 to December 2010.
2. To study the E-cadherin immunoreactivities in ductal neoplasm, lobular neoplasm and variants, previously identified by histology.
3. To study the association between lobular carcinoma in situ and coexisting DCIS and/or invasive carcinoma.

**Scope of study**

All breast cancer cases which were diagnosed between January 2006 to December 2010 in Maharaj Nakorn Chiang Mai Hospital, Thailand are surveyed. Only cases with the diagnosis of LCIS and DCIS regardless of coexisting invasive cancer were included in our study. All specimens (H&E stained and E-cadherin immunostained microscopic slides) were reviewed by three pathologists (BC, NS and SR) and important findings were recorded. Data analysis using SPSS for window version 17 and statistical study using descriptive analysis, frequency and percentage, were performed.

**Key words** : Lobular neoplasm, lobular carcinoma in situ, invasive lobular carcinoma, ductal carcinoma in situ, invasive ductal carcinoma.