CHAPTER III

MATERIALS AND METHODS

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 with or without invasive cancer were included in our study. All specimens (H&E stained and E-cadherin immunostained 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 were performed.

In our study, lobular carcinoma in situ was classified in to three variants; classic, pleomorphic and necrosis figures in accordance with three parameters including 1) nuclear grading 2) presence or absence of necrosis and 3)mitosis.

Classic LCIS (CLCIS) consists of a population of discohesive uniform small cells. Some tumor cells show intracytoplasmic lumens and mucin vacuoles. The cells of CLCIS can be further categorized as type A or type B. Type A cells are small with nuclear size up to 1.5-times those of small lymphocytes and have inconspicious nucleoli. Type B cells display larger nuclei, more abundant cytoplasm and may show a minimal degree of cellular pleomorphism.(2, 13)

PLCIS consists of a cellular population of variably discohesive pleomorphic medium to large cells with eccentric nuclei at least 4 times those of small lymphocytes and with distinct to prominent nucleoli(14). Marked distention of lobular units, necrosis and microcalcifications are frequently present, but are not necessary for the diagnosis of PLCIS. Although the cytologic features of PLCIS can mimic DCIS, the discohesive architecture, intracytoplasmic mucin with targetoid inclusions, and frequent presence of adjacent CLCIS should favor the lobular nature and prompt confirmation by immunohistochemistry (IHC)(2, 14).

E-cadherin immunostaining results were classified in to 5 categories; Negative (no staining), positive (positive staining in all tumor cells), faint positive (weakly positive staining in all tumor cells), focally lost (positive in most of the tumor cells) and focally positive (positive staining in small number of the tumor cells) Fig 1.

The patient's age, side of the breast, immunohistochemical staining and nuclear grading were defined from the accession of medical and pathological records.

Statistical Analysis

Our study is the descriptive study. SPSS for window version 17 was used to summarize the frequency and percentage.