



CHAPTER I

INTRODUCTION

Rationale and background

Cervical carcinoma is the most common cancer in Thailand. There are more than 5,600 women who suffering from this disease annually. Even though , there are many screening tests for cervical carcinoma such as conventional Pap Smear, liquid – based cytology ; Thin prep or Pap test, etc., about three-fourth of patients were diagnosed in advanced stage of disease (1) , which beyond surgical treatment. At present, radiation therapy (intracavitary and pelvic irradiation) with or without chemotherapy is the standard treatment for these patients (stage IB2 to stage III) with very promising response rate, especially in squamous carcinoma subtype. However, the effects of radiation were not limited to the tumor but also on the surrounding pelvic structures which resulted in both short-term and long term side effects.

Vagina is one of the structures that affected by radiotherapy. The effects range from vaginitis (thinning of epithelium and loss of rugae), because of direct effect from radiation along with estrogen deprivation after radiation castration in case of pre-menopause, which turned to vaginal shortening , and lately it turned to agglutination, then finally occlusion or stenosis from radiation fibrosis of the connective tissue (CNT) which in more than half of cases. It makes seriously affect on the patient physically, psychologically and sexual functionally. Additionally, for physicians, vaginal occlusion makes us difficult to perform the pelvic examination for clinical surveillance. Hence, restoration of vaginal function should be concerned after complete radiation treatment. Vaginal lubrication is introduced for sexual intercourse. Likely in atrophic vaginitis from menopause, local vaginal estrogen was applied to treat radiation vaginitis. This study was aimed to determine whether estrogen cream could reduce radiation vaginitis and prevent early vaginal occlusion in cervical cancer patients after complete radiotherapy.