Introduction
Introduction

The era of modern diagnostic cytopathology began with the publication in 1941 and 1943 by Dr G. Papanicolau and H. Traut of their work on the cytological diagnosis of uterine cancer. For many years, diagnostic cytopathology and surgical pathology/ Histopathology developed as parallel but essentially separate disciplines. However around 1960 Koss in the USA, Osborn in the UK, and others established a sound histopathological basis for the interpretation of cytological samples.

It was in Europe that Fine Needle Aspiration Cytology (FNAC) began to flourish in the 1950s and 1960s. Soderstorm in Sweden, Lopes Cardozo in Holland, and others became major proponents, studying thousands of cases each year. Zajicek, among the first of pathologists to embrace Fine Needle Aspiration Cytology in collaboration with Franzen at Karolinska Hospital, applied the requisite scientific rigor to define precise diagnostic criteria and to determine diagnostic accuracy in a variety of conditions. Disciples of these pioneers have spread the gospel to Europe, the Americas, Asia, and Australia and the technique is now part of the service of all sophisticated departments of Pathology.

Fine Needle Aspiration Cytology is a useful, safe, cost effective tool that is used in the diagnosis of lesions in various organs. The diagnostic accuracy has significantly improved recently due to cytopathologists
accumulating experience with this method and with the advent of
diagnostic radiologic modalities. Many recent studies on FNAC for
diagnosing neoplastic lesions with an epithelial origin and reactive
lesions, including lymph nodes, indicate that it has a satisfactory
diagnostic accuracy.\textsuperscript{9}.

Soft tissue tumors constitute a heterogeneous group in terms of
clinical presentation, morphological features and clinical behaviour. They
arise from the non-epithelial extra skeletal connective tissue exclusive of
the reticuloendothelial system, glia and supporting tissue of various
parenchymal organs. Embryologically, soft tissue is derived principally
from mesoderm with some contribution from neuroectoderm.
Neuroectodermally derived peripheral nerve tumors, however, have been
included traditionally among the soft tissue tumors because they pose
similar problems in management.\textsuperscript{10}

Even though the literature on Fine Needle Aspiration Cytology of
soft tissue masses is relatively scarce, a large amount of interest has
developed in this area in the last few areas due to the low cost of the
procedure, low incidence of complications, feasibility and high
therapeutic efficiency.\textsuperscript{10}

Fine Needle Aspiration Cytology is considered to be of limited value
in the diagnosis of soft tissue tumors in comparison with organs like
breast and thyroid. Most clinicians dealing with such a lesion are
reluctant to accept FNAC diagnosis in determining the treatment
modality, chiefly in view of the poor morphological expression in aspirates and the limited individual experience of the cytopathologist because of the low incidence of sarcoma. Nevertheless the cytologic and architectural findings published over the last few years, taken in conjunction with clinical and radiological data, enable cytologic diagnosis to be as precise as those reached through histologic examination in experienced hands.10

Diagnosis and classification of soft tissue tumors is one of the most difficult areas in surgical pathology. The relative absence of recognizable tissue architectural pattern in cytological preparation makes diagnosis by FNAC even more difficult. However FNAC offers several advantages10 –

1. The procedure involves minimal trauma, low cost and often no need for hospitalization.
2. It can yield an adequate diagnosis for establishing a therapeutic approach.
3. It can provide a predictive diagnosis of a benign or malignant neoplasm and in many cases also of specific tumor type.
4. If the diagnosis is of a benign neoplasm, surgery can be avoided in the elderly or other patients who are of a poor surgical risk.
5. In case of a high grade malignancy or of recurrent cancers, a cytological diagnosis allows the administration of a palliative treatment.

Fine Needle Aspiration Cytology is an outpatient department procedure necessitating neither patient preparation nor general anesthesia. It is safe, almost painless and cost effective. It has minimal risk of complications such as bleeding or infection and the risk of tumor spread is negligible.\(^\text{10}\)

The present study is undertaken to study the nature of various soft tissue tumors by Needle Aspiration Cytology and to compare the cytologic diagnosis with the results obtained by biopsy and thus assessing the diagnostic efficacy of Fine Needle Aspiration Cytology for soft tissue tumors.