Case Report

Telepathology in the diagnosis of Carcinoma of breast: A case report
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Introduction
Telepathology is the practice of pathology at a remote site using images (macroscopic, microscopic) transmitted by a variety of telecommunication system. Many countries have an acute shortage of specialist cytopathologists both for diagnostic service and for educational service. There are also many busy overcommitted pathologists who try to cope with Cytopathology, working in isolation in large traffic clogged cities, in remote inaccessible hospitals and in remote rural areas, who would benefit from regular contact with colleagues for confirmation of diagnoses, for second opinions, for discussion of difficult cases and for continuing education. E-mail connections have facilitated the convenient and inexpensive transfer of digital images around the globe. Sending images by e-mail attachment is easy and inexpensive. Their reception in most areas of the globe in very good, the quality and resolution of the images is surprisingly sharp with low, medium and high magnification. We are reporting here a case where telepathology played a vital role in the diagnosis of breast carcinoma.

Material and Method
A 33 year old single female presented with a left sided 6 cm firm breast lump. The overlying skin is fixed with the lump. The naked eye appearance suggests a tumour with pagetoid involvement of the nipple. A FNAC was done before by a competent pathologist and reported as traumatic fat necrosis. FNAC is done for second time by one of the authors (MGM). The features are presented below.

Pathology findings:
The material is hypercellular with a good number of atypical cells arranged in tight clusters and loose groups but the single malignant tumour cells are not present in the background. The cellular atypia are not sufficient enough to qualify it as malignant but there is obvious abnormality. Moreover, considering the clinical appearance of the breast the lesion was reported as suspicious malignant lesion but a confident diagnosis of breast carcinoma could not be made. The case was
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processed for telepathology consultation. Digital images are prepared from the cytology slides and also clinical images are prepared. All the images are sent to the participating pathologists by email with the above mentioned clinical history. Within 72 hours, five pathologists of Europe opined the case as duct cell carcinoma. The information was passed to the patient and also to the Surgeon. Accordingly, the patient was given chemotherapy and surgery was done. The surgical specimen came out as infiltrating ductal carcinoma, NOS, moderately differentiated. Again the case was sent to the same groups of Pathologists and everybody opined the same.

Discussion
Telepathology can play an important role in the diagnosis of patient particularly for second opinion. It can also play an important role in the education of Pathologists. In the present case the lesion was schirrous type and the tumour cells were small. Diagnosis of small cell type of breast cancer is very difficult and requires much experience. The practice of telepathology definitely helps the Surgeon in proper management of patients. At the same time it helps in the training of local Pathologists and thus increasing capabilities of local experts.

Reference
I. Mostafa MG, Learmonth GM. Telepathology in Bangladesh. Tise Orion 2003; 14:49.