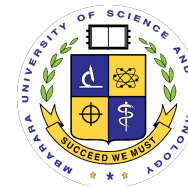


Review of the Primary Diagnosis of Breast Cancer in a Referral Hospital in Southern Uganda



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Background

The WHO recognises that treatment of low stage breast cancer is a cost-effective global priority and palliation of advanced disease is a humanitarian necessity. Appropriate treatment and palliation depends upon pathology. In low and middle income countries (LMIC) (countries of with a GDP per capita below \$5000 per annum) patients may have difficulties assessing appropriate diagnosis and treatment for cancers.

In Uganda (GDP per capita <\$1000) treatment is theoretically available for breast cancer (mastectomy, tamoxifen and CMF chemotherapy). Many patients present at an advanced stage and simple demographic and incidence calculations suggest that many are not seen by in the hospital service at all. A previous survey from the WHO had shown that the main barriers to appropriate and timely treatment in LMICs are travel, cost and family responsibilities.

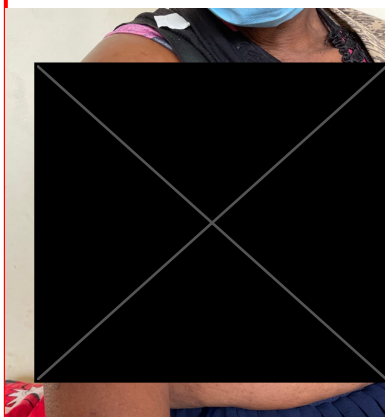
We here review pathology diagnosis in a referral hospital to determine if pathological diagnosis may be a barrier to treatment, particularly as in Uganda patients commonly take the histopathology report to seek further treatment.

Methods

We retrieved the histopathology and cytology reports of all cases coded as breast specimens in a recently installed web based pathology reporting system between February 2020 and August 2021. The following information was extracted from textual reports: age, sex, specimen type, tumour type, grade, stage, and receptor status. In 2019 we had carried out a telephone follow of 12 patients considered stage 1 to 3 cases seen in the FNA clinic: 7 could be contacted.

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56yr F seen in the FNA clinic, nipple retraction, peau d'orange, fixed nodes in the axilla with arm lymph-oedema and severely limited arm abduction. The patient had presented 5yrs earlier to village health workers and had repeated visits to medical and para-medial facilities as well as traditional healers. Only now referred for a tissue diagnosis. Stories like this are common and suggest that a major problem, rather than late presentation, is inappropriate early management

Results

There were 103 carcinoma cases. Median age 50 (range 24 to 91) including one male. The mode of diagnosis was by FNA (42 cases), open/excision biopsy (43) and needle biopsies (16). During this period 11 mastectomies were received-- three following chemo or radiotherapy.

•A histological tumour type and grade was recorded in all biopsies (open and needle): 50 NST, 8 lobular and 5 other types. Grade distribution was: G1: 7; G2: 31; G3: 14. In only 18 cases were receptors (ER & PR) reported.

•Stage was difficult to assess as tumour size and axillary node status (clinical and/or pathological) was only recorded in 28 and 38 cases respectively.

•A telephone follow up of 7 cases considered stage 1 to 3 diagnosed in the pathology FNAC clinic determined that none had received specific treatment within 3 months.

Conclusion & Comment

• Enquiries have determined that extensive use of open/excision biopsies is due to the high cost of biopsy needles, the low rate of reporting receptors is due to reagent unavailability, staffing, and organisational issues (IHC is carried out manually). The private sector in Southern Uganda is small, the majority of patients cannot afford their services so our findings probably reflect the common experience.

•FNAs are widely used as a method of primary diagnosis in low income countries, however they do not offer a tumour type, grade or receptor status requiring patients to return for further biopsy.

•Open biopsies or excision biopsies are unsatisfactory. They use valuable operative resources and many patients may believe that (with excision biopsies) the lump has gone and they have been treated.

•Actions suggested.

•Ensuring the availability of biopsy needles.

•Resourcing routine receptor assays and timely cellular pathology reports.

•Ensuring appropriate stage information is recorded on pathology reports.

•The above would substantially improve the information available to patients when seeking treatment. If this information is complete an MDM discussion could recommend options for appropriate treatment that could be included on the report.

•Changing the culture of explaining poor outcomes as due to 'late presentation' to 'failure to refer' could incentivise the health community to improve practice.

•Education in identifying 'red flag' lumps should be provided to village health workers and staff in HCs Level III and IV.

•The authors are seeking to start a biopsy clinic for direct referrals of appropriate 'red flag' lumps.