Phyllodes tumors account for 0.5% to 1.0% of all breast tumors. In this mesenchymal cells are of neoplastic potential. \[1\]

**Objective:** This study was performed to determine the subtypes of phyllodes tumor (PT) and to describe their characteristics in patients at a single tertiary healthcare center.

**Methods:** This retrospective cohort study included all cases of PT of the breast treated at our hospital from 1 January 2015 to 31 December 2017. The patient's demographic, tumor characteristics, and pathology reports were analyzed.

**Results:** Twenty-five patients were enrolled. Their median age was 37 years. In total, 80% had benign phyllodes, 12% borderline, and 8% had malignant. All 25 patients underwent surgery and no recurrence was found in follow-up period of 2 years.

**Conclusion:** Phyllodes tumors are usually benign; breast tumors which may be locally aggressive. However, they have significant cure rates and disease-free duration.

**KEYWORDS**
Phyllodes tumors, breast tumors, breast conservative surgery

**INTRODUCTION**
Phyllodes tumors (PTs) account for 0.5% to 1.0% of all breast tumors. They are histologically distinguished from adenocarcinoma of the breast as in this mesenchymal cells are of neoplastic potential. \[2\] PTs are histologically classified on the basis degree of stromal pleomorphism, mitoses, stromal overgrowth and nature of the tumour margins by the World Health Organization (WHO) as benign (35%–64%), borderline and malignant (10%–30%). Malignant PTs tend to recur and metastasize. \[3\] Surgical excision with negative surgical margins is the mainstay of treatment. Radiation therapy (RT) is used if tumor is locally aggressive. \[4\] We conducted this retrospective study to review the cases of PT, the histological subtypes of PT according to the WHO classification, the tumor characteristics, and follow-up of patients at a single tertiary healthcare center.

**MATERIALS AND METHOD**
This was a retrospective cohort study. We reviewed all the cases of PT of breast at a tertiary health care center, from 1 January 2015 to 31 December 2017. Patients of all ages with a histologically proven PT of the breast were eligible for inclusion. Each patient's hospital medical record was reviewed for demographic, clinical, treatment, and pathological findings. Pathology slides and reports were reviewed. Patients were followed up for a duration of 2 years.

**STATISTICAL ANALYSIS**
was performed using SPSS Statistics for Windows, version 23.0. Descriptive analyses of demographics, tumor characteristics, and treatment were conducted.

**RESULTS**
Our study cohort was comprised of 25 patients with histologically proven PT. The median age of the study population was 37 years (mean age, 32 years). Of the 25 patients, 18 (72%) had left breast disease, 7 (28%) had right breast disease. All (100%) patients underwent surgical tumor removal. Of these 25 patients, 21 (84%) underwent lumpectomy or wide local excision (breast conservative surgeries) and 4 (16%) under-went simple mastectomy. The median size of the tumors was 6.0 cm (mean size 5.2 cm). According to the WHO grading system, 20 (80%) of the resected tumors were benign, 3 (12%) were borderline and 2 (8%) were malignant. Histopathological examination of the surgical specimen showed that 3 (12%) patients had positive surgical margins. All twenty-five patients were stable at the last follow-up period of 2 years with no disease recurrence.

**DISCUSSION**
Phyllodes tumors accounts for 0.5% to 1.0% of all breast tumors. It is composed of epithelial and mesenchymal elements, the latter giving it its neoplastic features. \[5\] On the basis of its histologic characteristics WHO classified PT into three types: benign, borderline, and malignant. \[6\] This classification helps to predict the development of local recurrence, metastatic disease or both. PTs are usually benign, less commonly borderline. (35%–64%) Malignant Phyllodes tumors account for 10% to 30% of all PTs and they have a higher chance of recurrence and metastasis. \[7\]

In our study, we found 20 (80%) benign, 3 (12%) borderline, and 2 (8%) malignant phyllodes tumors cases. Hence, we had slightly more number of cases of benign PT. PT mostly seen in women aged 35 to 55 years. They present as a well-circumscribed, firm, smooth, and may be painful mass. \[8\] In present study, the age ranged was from 18–62 years with median age is 37 years. Hence finding are similar to other studies. \[9,10\] Even benign PT is known to be locally aggressive, it was treated by mastectomy to ensure disease-free survival. However, now mastectomy has been replaced by breast conserving surgery (BCS) with adequate surgical margins as the treatment of choice. \[10,11\] The most common site of metastases of PTs is the lung, followed by the bone, heart, and liver. \[10\] Axillary lymph node dissection is not done as metastases to these lymph nodes is less than 1%. \[10,11\] The optimal treatment for PT is resection with a 1-cm margin all around, particularly for borderline and malignant PT. The size of the tumor and type of PT determine the choice of surgery (lumpectomy versus wide local excision versus simple mastectomy). \[10,11\]

In this study of 25 patients, 21 (84%) patients underwent lumpectomy or wide local excision (BCS) and 4 (16%) underwent simple mastectomy. The median size of the patients' tumors was 6.0 cm, and the mean was 5.2 cm. The type of the tumor and the margins after resection predict the likelihood of local recurrence and distant metastases. \[12,13\] Studies shows, all patients who had recurrence had positive surgical margins. \[11,12\] Thus, negative margins improves long-term survival and disease-free survival and reduce recurrence. \[12,14\] Of the 25 patients who underwent surgery, pathological examination of the surgical specimen showed that 3 (12%) patients (2 were benign PT and 1 was borderline PT) had positive surgical margins. During the follow up period of 2 years all the patient were disease free (no recurrence).

Various studies showed total mastectomy and BCS offer comparable survival benefits. \[12,15\] Most of the patients of PTs don't required any further treatment other than surgical but some times radiotherapy may be given if locally aggressive.

**CONCLUSION**
Phyllodes tumors are usually benign breast tumors which may be locally aggressive. However, they have significant cure rates and disease-free duration.
disease free interval. The first line of treatment for such tumors are breast conservative surgery and mastectomy. In this study our results are similar to the present literature in terms of its incidence, tumor type and treatment modalities.

**PIT FALL OF THE STUDY:** Our study sample size was small.

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**REFERENCES:**