April 11<sup>th</sup>, 2023 | Webinar

### SCIENTIFIC TRACKS & ABSTRACTS

**BREAST PATHOLOGY 2023** 

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## To study the association of benign breast lesions with malignant lesions of breast in histopathology.

Background:

#### Background

Breast cancer is the most common cancer in women It is the leading cause of death from cancer for women in age group 40-44 years. **Benign diseases** are important risk factors for later development of breast cancer.

#### Aims and Objectives

To study the incidence of association of benign breast disease in breast malignancy. To study the epidemiology of benign breast disease associated with malignancy. To study the pattern of benign breast diseases associated with carcinoma breast. To establish the relative significance of development of carcinoma with preexisting benign breast diseases.

#### Material and Methods

All patients who underwent **mastectomy** for carcinoma breast were recorded. No of patients -50 . Study Period- Sep 22' to Feb 2023. Sections were taken from tumor mass and surrounding normal tissue 2cm away from tumor mass. All sections were processed and stained with H and E stain.

#### Results

Among the cases studied most of the patients observed were of age group 40-50 years . 56 percent patients strong family history. Most of women were of perimenopausal group. Out of 50 cases Non proliferative lesions 44%, **Ductal carcinoma** in situ 16%,Calcification 12%, Ductal hyperplasia without atypia 8%,Apocrine metaplasia 8%,Adenosis 8%,Fibrocystic disease 4%. Among the cases studied most common premalignant condition observed was ductal carcinoma in situ followed by ductal hyperplasia without atypia,adenosis and apocrine metaplasia.

#### Conclusion

Benign changes observed in surrounding normal tissue of mastectomy specimen support the finding that these conditions are associated with the **breast cancer** risk.

#### Biography

Dr Sarandeep Singh Puri is working as Associate Professor in department of Pathology. He has 10 years of experience in the field of Teaching, Research and Diagnostics. He has done fellowship in Hematology from Kings College London, United Kingdom. He has been actively involved in research and has more than 50 publications in National and International indexed Journals to his credit. He has presented papers and posters, delivered lectures as speaker, judged scientific sessions in various conferences. He has been actively involved in conferences and workshops as a Speaker, Organising Secretary, Treasurer. He is working as PG Academic Incharge and Coordinator for Undergraduate Research projects at the Medical School.

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Dr Sarandeep Singh Puri,

Sharda University, Greater Noida, India.

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### Rare serosal cystic gastric gastrointestinal stromal tumor with extensive intestinal metaplasia in an adherent gastric mucosa; A case report in a 65-year-old male.

**ABSTRACT:** 

Gastrointestinal intestinal stromal Tumors account for 60% of mesenchymal Gastrointestinal tract tumors commonly located in the stomach and small intestine, predominantly solid tumors which rarely undergo cystic degeneration. A 65-year-old patient with increasing upper abdominal swelling and a CT-scan abdomen showed a large unilocular 17x16x15 cm lesion. Upon exploration, a colossal cystic swelling in the lesser omentum, anterior to the stomach, was found. Histopathological examination showed a spindle cell tumor turned out to be CD117 positive and S100 negative on immunostains. The tumor was moderate risk gastric GIST based on the site; Stomach, Size> 10cm; Mitosis <5/5mm2 according to Risk assessment of GIST, 2006.GISTs are predominantly solid tumors, and rarely undergo cystic transformation. The primary differential diagnoses of spindle cell neoplasm are GISTs, Leiomyoma, Leiomyosarcoma, and Schwannoma. These spindle cell neoplasms are differentiated by applying a panel of Immunohistochemical stains, CD117, SMA, and S100.

#### **Biography:**

Fariha Sahrish has completed her post graduate degree FCPS at the age of 30 years from college of physcians and surgeons, Pakistan She is assistant professor and consultant histopathologist in Azra Naheed medical college. She has published more than 5 papers in reputed journals in Pakistan

Fariha Sahrish,

Azra Naheed Medical College, Superior University, Pakistan

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### Building pathology capacity in sub-saharan Africa to improve breast cancer diagnosis and treatment: Training laboratory technicians in high-quality manual immunohistochemistry

#### Background/Objective

**Breast cancer** mortality worldwide is highest in sub-Saharan Africa where an estimated one third of deaths over the next decade are preventable with improved diagnosis and treatment. To address the need for increased pathology capacity and a skilled workforce, we developed an educational program aimed at training pathology technicians in highquality manual immunohistochemistry (IHC).

#### Methods

We mobilized faculty consisting of pathologists, an immunologist, a **breast surgeon**, laboratory technicians and a non-profit from Australia, Ethiopia, Germany, Kenya, South Africa, and USA. We conducted a baseline assessment across 11 countries about the available space, equipment, and human resources using five-point Likert-scale questionnaires and free text. We launched a webinar (covering IHC theory, methods and troubleshooting); conducted knowledge assessments (pre and 35 days post-webinar using paired t-test); and invited participants to join an interactive digital mentorship platform (DMP) for posting discussions, sharing protocols, and networking. At six months, a pathologist presented the experience of implementing manual IHC in Hawassa, Ethiopia. Over 6 months, we tracked activity on the DMP, the number of times presentation recordings were viewed, and participant surveys on progress.

#### Results

A total of 263 participants from 11 countries attended the webinar. 95 participants from 9 countries responded to a survey: 62 histotechnicians, 11 pathologists, 4 pathology residents, 1 resident, and 17 "other" professionals. The majority (53.7%) reported their institutions do not perform IHC. Most institutions with IHC perform it manually. The most common assay was for breast cancer biomarkers: estrogen receptor (100%); progesterone (92.5%); and Her2neu (87.5%). The most common treatments frequently or always available for breast cancer were surgery (64.2%), chemotherapy (45.3%), endocrine therapy (34.8%), radiation (15%), and Her2neu directed therapy (< 14%). After the webinar, the mean knowledge assessment scores increased by 17.4% (from 41.8% pre to 59.2% post, p=< 0.0001). Self-reported confidence in topics increased by 11.3% (mean 3.36 pre-webinar to 3.74 post, p=0.1). 64 participants joined the DMP. Over six months, recordings were accessed 412 times. After the Hawassa pathologist's presentation, membership in the DMP increased from 64 to172 and the recording was viewed 33 times in 30 days. Six months into our education program, 113 participants from 9 countries responded to surveys on progress. Of the 56 respondents who do not perform IHC, 64.3% (n=36) had begun discussions about starting it. Among 85 respondents, 43.5% reported moderate or significant positive practice changes such as improved antigen retrieval techniques, protocol development, and training others on optimization of preanalytical variables.

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Alemwosen Alem,

Hawassa University Comprehensive

Specialized Hospital, Ethiopia.

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#### Conclusions

Our education intervention 1) reached hundreds of participants and provided a baseline assessment of pathology capacity in institutions in nine sub-Saharan African countries; 2) created a novel mechanism to enable collaboration, resource sharing, and assessing progress with this cohort; and 3) improved practices and the preparation of slides for the majority performing **manual IHC**. Sustained engagement is needed for further building pathology capacity and tracking long-term impact on breast cancer treatment regionally.

#### Biography

Alemwosen Teklehaymanot Alem, M.D., Assistant Professor of Anatomic Pathology, Department of Pathology, College of Medicine and Health Sciences, Hawassa University, Ethiopia.

As Head of the Pathology Department at Hawassa University, Dr. Alem oversees pathology services for patient referrals, teaches students, and advises postgraduate students on their research projects. Dr Alem has several published articles on local & international journals and three research projects on breast cancer under peer review. Over the last two years, Dr. Alem has been leading a program training his staff to provide immunohistochemistry (IHC) services at Hawassa University Comprehensive Specialised Hospital. As of 2022, Dr. Alem's team has commenced implementing IHC for breast cancer in the pathology lab and will be able to provide differentiated cancer diagnostic services for patients in southern Ethiopia and the Oromia region.

#### Alemwosen Alem,

Hawassa University Comprehensive Specialized Hospital, Ethiopia.

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