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TUBULAR AVASCULAR INTRADUCTAL LESION MIMICKING PAPILLOMA IN AN ELDERLY PATIENT: RADIOLOGIC FEATURES OF UNDERLYING SOLID PAPILLARY CARCINOMA

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ABSTRACT

Solid papillary carcinoma (SPC) is a rare breast malignancy that often mimics benign papillary lesions on imaging. Its indolent appearance and limited sampling during core biopsy frequently lead to misdiagnosis. We report a case involving a 70-year-old woman who presented with a left periareolar mass and serous nipple discharge. Mammography demonstrated an equal-density tubular lesion in the retroareolar region. Ultrasound revealed a well-defined, avascular, hypoechoic tubular lesion measuring 0.5 × 1.3 × 1.2 cm, in continuity with dilated ducts. Ultrasound-guided biopsy suggested an intraductal papilloma; however, wide local excision revealed invasive SPC with neuroendocrine differentiation. This case highlights the diagnostic challenge of SPC, which may closely mimic benign intraductal papillomas on imaging. In elderly patients, avascular tubular intraductal lesions should not be presumed benign. When biopsy results are inconclusive or imaging-pathology correlation is discordant, surgical excision is recommended to secure an accurate diagnosis and prevent delayed detection of malignancy.

Keywords: solid papillary carcinoma, intraductal papilloma, breast ultrasound, elderly, avascular lesion, radiologic-pathologic correlation.

RARE BREAST CANCER MIMICKER (SMOLD) – CASE REPORT

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ABSTRACT

Squamous metaplasia of the lactiferous duct (SMOLD), also known as periductal mastitis or Zuska's disease, is a rare benign breast condition, often misdiagnosed - characterized by replacement of normal ductal epithelium with keratinizing squamous epithelium. This can lead to duct obstruction, recurrent inflammation, and abscess formation, often resembling malignancy in clinical and radiologic evaluations. We present the case of a 68-year-old lady with worsening left breast swelling. Physical examination showed painless left breast swelling with axillary lymphadenopathy. Initial imaging revealed suspicious left breast mass with skin infiltration and lymphadenopathy. Core biopsy showed fat necrosis. Surgical excision was performed and histopathological confirmed squamous metaplasia of the breast ductules with extensive fat necrosis. No recurrence at 1year radiologic follow-up. This case highlights the importance of considering SMOLD in the differential diagnosis of chronic breast swellings which may mimic malignancy. Histopathological evaluation is crucial for definitive diagnosis and to avoid unnecessary surgical or oncologic interventions.

Keywords: SMOLD, breast, BI-RADS, biopsy

MALIGNANT MELANOMA OF BREAST: A RARE CLINICAL ENTITY

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ABSTRACT

The incidence of melanoma is very low in Asian country especially in Malaysia. Primary malignant melanoma of breast is even rarer, account for less than 5% of all melanomas. We report a case of a 49-year-old woman who presented with a year-long history of a large right breast lump extending to the axilla. Physical examination revealed no suspicious skin lesions elsewhere. However, her final histopathology report from the core needle biopsy revealed a malignant melanoma of the breast. This case underscores the diagnostic challenge due to its rarity and absence of cutaneous lesions. Prognosis is generally poor, emphasizing the importance of early diagnosis and timely intervention which includes surgical management and adjuvant therapy. We review the relevant literature and a discussion regarding guidelines available for diagnosis, follow-up and surveillance of this rare case. Awareness and comprehensive treatment planning are essential to improve outcomes in such rare presentations of breast melanoma.

Keywords: malignant melanoma, breast carcinoma, primary, metastasis

PSEUDOANGIOMATOUS STROMAL HYPERPLASIA IN MALE PATIENT MIMICKING BREAST MALIGNANCY, A RARE CASE REPORT

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ABSTRACT

Pseudoangiomatous stromal hyperplasia (PASH) is a benign mesenchymal proliferative lesion usually affecting perimenopausal women. It is characterized by stromal proliferation and the formation of pseudo-vascular structures. Occasionally, PASH is diagnosed in males, and is usually associated with gynecomastia and hormonal changes. PASH can present as a palpable breast mass and may show mammographic findings that mimic those of breast malignancy. We present a case of a male patient with a painless, palpable left retroareolar swelling, which radiologically appeared suspicious for malignancy. Ultrasound and mammography revealed a circumscribed, macrolobulated mass with spiculated margin at the left retroareolar region, prompting BIRADS 4c lesion. Despite its suspicious radiological findings, the histopathological features are consistent with PASH. This case emphasizes the challenges in diagnosing PASH in male patients, as radiologically it resembles primary breast malignancy. Thus, understanding the pathology of PASH is very important for accurate diagnosis and to prevent unnecessary intervention, like mastectomy.

Keywords: PASH, gynecomastia, mesenchymal proliferation, breast cancer mimic

RADIOLOGIC CHARACTERISTICS OF BREAST TUBERCULOSIS WITH PATHOLOGIC CORRELATION: INSIGHTS FROM A CASE SERIES

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ABSTRACT

INTRODUCTION
Breast tuberculosis is a rare extrapulmonary entity that can closely mimic breast carcinoma on clinical and radiologic evaluation. Timely diagnosis is vital to prevent mismanagement and avoid unnecessary surgical interventions.

CASE REPORT
We present a case series involving two cases of histologically confirmed breast tuberculosis in young women with clinical features mimicking breast abscess and carcinoma. Both patients had bilateral breasts involvement, which is uncommon in tuberculosis mastitis. Imaging findings ranging from hypoechoic sinus tracts and ill-defined abscesses on ultrasound to high-density masses on mammogram, with CT revealing peripheral rim-enhancing lesions. Histopathology revealed granulomatous mastitis with Langerhans-type giant cells, without caseating necrosis or acid-fast bacilli. Both patients completed antituberculosis treatment and demonstrated good clinical response.

CONCLUSION
Breast tuberculosis should be considered in atypical breast lesions, especially in endemic areas. Accurate diagnosis requires radiologic and histopathologic evaluation. Early antituberculosis therapy leads to clinical resolution and reduces the need for surgery.

Keywords: breast tuberculosis, ultrasound, mammogram, CT, histopathology

SUSPICIOUS MALE GYENOMASTIA- RARE TWIST

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ABSTRACT

Male breast disease accounts for under one percent of all breast pathologies, and clinician unfamiliarity often delays diagnosis. We report a 41-year-old man with metabolic syndrome and impaired renal function who developed bilateral mastalgia and progressive, asymmetric breast enlargement over nine months. Examination revealed nodular thickening behind the left nipple. Digital mammography showed a large radiolucent mass containing coarse calcifications in the left breast. Ultrasonography demonstrated a lobulated, predominantly hyperechoic lesion spanning the lower inner and outer quadrants, interspersed with multiple discrete hyperechoic foci, but no suspicious lymphadenopathy. Although the imaging appearance suggested a benign fat-containing lesion, its size, heterogeneity and calcifications raised concern for liposarcoma, an exceptionally rare adipocytic malignancy that can masquerade as gynecomastia. Core biopsy was therefore performed. Histopathological examination revealed fat necrosis with surrounding fibrosis and no evidence of malignancy. The patient is being followed with serial imaging and clinical review. This case illustrates three crucial learning points: (1) rapid enlargement, complex echotexture and calcification constitute a "red-flag" triad in male breast masses; (2) multimodality imaging refines, but does not replace, the need for tissue diagnosis when features are indeterminate.

Keywords: Male Breast, Gynecomastia

RELATIONSHIP BETWEEN CORONARY ARTERY CALCIFICATION SCORE AND CAROTID INTIMA-MEDIA THICKNESS AMONG PATIENTS SCHEDULED FOR CARDIAC COMPUTED TOMOGRAPHY - A SINGLE CENTRE STUDY

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ABSTRACT

Background
Coronary artery disease (CAD) is the leading cause of death and morbidity worldwide. In 2018, CAD death in Malaysia reached 24.69% of total death. Atherosclerosis affects the coronary arteries and other vascular structures, particularly the carotid arteries. Coronary artery calcification score (CACS) and carotid intima-media thickness (CIMT) are used as non-invasive markers of atherosclerosis. CIMT is frequently used as a screening tool since it is readily available. The aim of this study is to evaluate the correlation of CACS and CIMT among patients scheduled for cardiac computed tomography (CCT) in Hospital Tuanku Fauziah, Perlis.

Methodology
An observational study was conducted on patients who had been referred for CCT/CACS. Patient then underwent ultrasound examination of the neck to check for CIMT at three different levels. The data collected was analysed to determine the correlation between CACS and CIMT.

Results
A total of 112 patients underwent CCT/CACS in this study. Mean age of patient was 56.5 years old (+/-12.02 year old). Mean CIMT measures 0.67mm (+/-0.15mm). Mean-max CIMT was 0.93mm (+/-0.22mm). The median CACS was 102 (interquartile range 0-528.5). A statistically significant correlation between CACS and all mean and max values of CIMT scoring based on the different anatomic sites used for measurements noted with p-value less than 0.05. Composite mean value of CIMT had the highest correlation coefficient with CACS (r is 0.58) as compared to different segments suggestive of moderate to good correlation. Additionally, both age and gender of the patients were the significant factors to predict CACS > 0 and CIMT > 1mm.

Conclusion
Comprehensive long-term studies with standardised protocols are required to determine the utility of composite mean CIMT as inclusion into risk stratification of stable CAD.

Keywords: coronary artery disease, atherosclerosis, coronary artery calcification score, carotid intima-media thickness, cardiac computed tomography.

RADIATION-INDUCED CARDIAC COMPLICATIONS IN LEFT BREAST CANCER PATIENTS: DOSE AND MRI FINDINGS

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ABSTRACT

Background
Radiotherapy (RT) is a valuable adjuvant therapy for breast cancer (BC), but cardiotoxicity is a concern. Although modern RT techniques have reduced radiation doses, reaching the heart and its substructures, radiation-induced cardiac complications is still a concern, especially among left BC cancer patients. Cardiovascular magnetic resonance (CMR) is the gold standard for assessing radiation-induced cardiac complications because it is non-invasive and does not use ionizing radiation. This study evaluates the impact of RT on cardiac health in left BC patients by quantifying radiation doses to the heart, comparing these doses between different surgical approaches, assessing cardiac involvement through CMR analysis, and determining correlations between radiation exposure and CMR findings.

Methodology
The study included 20 adult female left BC patients with no history of cardiovascular diseases who underwent 3D-CRT after surgery. Radiation doses to the heart and its substructures were quantified using the treatment planning system, with dose-volume histograms used to extract cardiac dose parameters. CMR was performed post-RT to assess radiation-induced cardiac changes. Pearson's correlation was used to determine the relationship between dose and CMR findings.

Results
Radiation doses to the heart and its substructures during 3D-CRT for left BC were heterogeneous yet optimum regardless of the surgical procedure they underwent and cardiac involvement, as assessed by CMR, remained minimal in most patients, with normal cardiac morphology and function observed at an average follow-up of five years post-treatment.

Conclusion
The weak correlations between average doses received during therapy and CMR-derived metrics further suggest that, in this cohort, radiation exposure to the heart did not strongly impact cardiac structure or function.

Keywords: Radiation-induced cardiac disease, left breast cancer, radiotherapy, cardiac magnetic resonance imaging.

WHEN ARTERY MEETS ATRIUM: A RARE LEFT MAIN CORONARY ARTERY ANEURYSM WITH CAMERAL FISTULA TO THE RIGHT ATRIUM

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ABSTRACT

Coronary artery aneurysms are rare, and their coexistence with coronary cameral fistula (CCF) is even more uncommon. We report a case involving a 58-year-old female with history of dilated cardiomyopathy who was incidentally found to have continuous cardiac murmurs. Echocardiography revealed moderate mitral and aortic regurgitation, with preserved right ventricular function. Cardiac CT identified a giant aneurysm arising from the left main coronary artery (LMCA) traversing in between the aortic root and left atrium, coursing to the right, communicating with the right atrium, consistent with a LMCA-to-right atrium coronary cameral fistula. No obvious masses were detected along fistula tract, valves or cardiac chambers. The patient was asymptomatic, with no clinical signs of heart failure or ischemia. This case emphasizes the value of multimodality imaging in detecting rare coronary anomalies and highlights the importance of accurate anatomical characterization for risk stratification and guiding clinical management.

Keywords: Left main coronary artery aneurysm, Coronary cameral fistula, Cardiac CT, Echocardiography

CTA CORONARY CONFIRMS SUPRACARDIAC PARTIAL ANOMALOUS PULMONARY VENOUS CONNECTION: A RARE VASCULAR ANOMALY DETECTED DURING DIALYSIS CATHETER INSERTION

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ABSTRACT

Partial anomalous pulmonary venous connection (PAPVC) is a rare congenital vascular anomaly in which one or more pulmonary veins drain into the systemic venous circulation instead of the left atrium, potentially complicating vascular interventions. We present a case of a 39-year-old female with end-stage renal failure (ESRF) who underwent attempted cuffed catheter insertion for dialysis access. During the procedure, an unusual vascular course from the superior vena cava (SVC) was encountered, initially raising concern for a pulmonary artery communication. CT pulmonary angiography excluded this possibility; however, coronary CT angiography (CTA) subsequently confirmed a right superior pulmonary vein draining anomalously into the SVC, consistent with supracardiac-type PAPVC. This incidental finding underscored the importance of advanced imaging in diagnosing vascular anomalies. Recognizing PAPVC is critical in patients requiring central venous access to prevent procedural complications and misdiagnosis. Coronary CTA provided definitive anatomical characterization, guiding clinical management in this complex scenario.

Keywords: Partial anomalous pulmonary venous connection, Coronary CT angiography, Central venous catheter insertion