

Abstract: Para Clinical Sciences

Depression as Co-morbidity in Previously Diagnosed Patients of Hypertension, Diabetes Mellitus, or Both in a Rural Area of Jaipur

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INTRODUCTION

Depression is a characterized by persistently low mood or loss of interest in activities, causing significant impairment in daily life. This study aimed to study depression as a co-morbidity in previously diagnosed patients with hypertension, diabetes mellitus, or both in rural area of Jaipur.

METHODS

A community-based cross-sectional study was conducted in rural health village Dadiya, with a population of 6493. A total of 360 participants with a positive history of hypertension, diabetes mellitus, or both for more than one year were enrolled in the present study. All the participants were subjected to PHQ-9 evaluation. Those with a score of 10 or more were considered suffering from depression.

RESULTS

The overall prevalence of depression was 34.5% (n = 124). Among participants having hypertension (HTN) as co-morbidity 33.3% (n = 90) had depression, in participants with diabetes mellitus (DM) as co-morbidity 31% (n = 9) had depression and in participants having hypertension and DM as co-morbidity 41.7% (n=25) had depression. When the association between depression and co-morbidities was tested, the p-value was 0.560 (>0.05). Hence, there was no significant association between depression severity and co-morbidities.

CONCLUSION

Due to potential adverse health consequences of depression and comorbid HTN and DM, these conditions should be optimally treated to maximize patient outcomes. Older adults, sedentary workers, farmers, unemployed, and underweight people had significantly higher depression severity than the rest of the study population.

Etiological Profile and Antimicrobial Resistance Pattern of Blood Culture Isolates by Automated Method in Cases of Neonatal Sepsis at a Tertiary Care Hospital, Jaipur: A Prospective Observational Study

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INTRODUCTION

The present study was aimed to isolate and identify bacterial isolates from blood samples of neonates suffering from neonatal sepsis by the automated method and to find out the antibiotic susceptibility pattern of isolates isolated from neonates suffering from neonatal sepsis automated method.

METHODS

The present study has been carried out on 253 neonates with signs and symptoms of septicemia, in the bacteriology section, using conventional and automated methods.

RESULTS

Out of 253 cases, blood culture was positive in 92 (36.36%) cases in which 84 (91.30%) were bacterial isolates and 8 (8.70%) were candida isolates. Among 82 bacterial isolates, 39 (47.56%) were Gram-negative and 43 (52.44%) were Gram-positive isolates. Among the culture-positive cases, 26 (31.70%) were term neonates and 56 (68.30%) were preterm neonates. Cases of early-onset sepsis (EOS) were 49 (59.75%) whereas cases of late-onset sepsis (LOS) were 33 (40.25%). Twenty-five (30.48%) neonates were inborn and 57 (69.52%) were out born. The highest incidence of neonatal septicemia was seen in very low birth weight neonates 37 (45.12%) followed by low birth weight 23 (28.04%) and normal birth weight 16 (19.51%).

CONCLUSION

Early treatment and appropriate selection of antibiotics would minimize the risk of severe morbidity and mortality in neonatal sepsis, and reduce the emergence of multi-drug resistant organisms in neonatal intensive care units.

Comparison of Sputum Conversion Rates among Sputum Positive, Pulmonary Tuberculosis Patients Treated under RNTCP Daily Fixed-Dose Regimen with Intermittent Regimen in Jaipur, Rajasthan: A Retrospective Cohort Study

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INTRODUCTION

Tuberculosis is a major public health challenge for India. Despite many treatments regimen recommended by WHO India implemented a daily fixed-dose regimen. The study aimed to compare sputum smear conversion rates in smear-positive cases (cat-1 and 2) under RNTCP daily fixed-dose regimen with Intermittent DOTS, to compare weight gain patterns and their impact on treatment outcomes in both regimens, to compare compliance of therapy and treatment outcomes in both regimens and to assess co-morbidities among the study participants.

METHODS

A retrospective cohort study was conducted on 126 subjects in the field practice area using a case record proforma. Data regarding patient sociodemographic and treatment details were extracted from patients' treatment cards maintained at peripheral health institutes.

RESULTS

Sputum conversion rates at end of the intensive phase (IP) were 100% in the daily fixed-dose regimen and 97.78% in the intermittent regimen. Weight gain at end of the continuous phase in the intermittent DOTS regimen was statistically significant. The treatment success rate was 87.34% in daily fixed-dose regimen and 91.49% in intermittent DOTS regimen which was not statistically significant. Compliance was 100% for intermittent regimens and 96.6% for a daily regimen. In daily fixed-dose 8(10.13%) patients were comorbid while 6.38% of patients in intermittent DOTS regimen.

CONCLUSION

Both the treatment regimens were comparable in sputum conversion rates, treatment outcomes, weight gain, compliance and co-morbidities.

Outcomes of High-Risk Pregnancy and Associated Factors in Rural Jaipur, Rajasthan: A Community-Based Longitudinal Study

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INTRODUCTION

Motherhood is a natural phenomenon, but safe motherhood is fraught with many complications related to pregnancy and childbirth. The major direct causes include haemorrhage, infection, high blood pressure, unsafe abortion, and obstructed labour, primarily preventable consequences of high risk pregnancy (HRP). The current study aimed to assess the prevalence of high-risk pregnancy, the impact of associated factors on the outcomes of HRP according to Pradhan Mantri Surakshit Matritva Abhiyan, determine the outcome of mother and child at the time of delivery, to assess the outcome of the mother and child at 6th week of life according to HBPNP card.

METHODS

A longitudinal study was conducted in the field practice area using a case record proforma. Data regarding ANC's baseline values and follow-up visits were taken up from PHC records, hospital records, and RCH registers with ASHA's.

RESULTS

A total record of 513 ANCs was taken up. A total of 236 HRP were identified that included history and the present ANC conditions. Out of these 39.21% had preterm delivery and 2.20% had post-term delivery, which was statistically highly significant. On the association of high-risk pregnancy with the mode of delivery, 35.68% had LSCS as the mode of delivery which was statistically significant. There was a higher rate of abortion in HRP (3.81%), which was statistically significant.

CONCLUSION

High-risk pregnancies had a significant association with the type of delivery and mode of delivery. Similarly, obstetric history had a significant association with the type of delivery and mode of delivery.

Histopathological Study of Cervical Lesions in Hysterectomy and Biopsy Specimen

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INTRODUCTION

Diseases of uterus have been broadly grouped into inflammatory, benign, and malignant lesions. The aim of this study was to determine the frequency and histomorphological patterns of various non-neoplastic and neoplastic cervical lesions and find out the most prone age group for these lesions so as to target them for various screening programs for early detection of non-neoplastic and neoplastic lesions and raise awareness.

METHODS

Clinical, epidemiological and morphological study of the gross and histopathological findings of the cervix on a total of 438 specimens that included a hysterectomy and cervical biopsies were studied.

RESULTS

Out of 438 cases, 349 cases showed cervicitis is which included 348 cases of chronic nonspecific cervicitis (CNSC) and one case of tubercular cervicitis. Out of 348 cases of CNSC showed associated lesions like 4 (1.15%) were koilocytic change, 98 (28.16%) squamous metaplasia, 169 (48.56%) nabothian cyst, 8 (2.3%) microglandular hyperplasia, and 4 (1.15%) tunnel clusters were noted. Out of 61 cases of carcinomas, 53 (86.89%) were squamous cell carcinoma, 3(4.92%) were endocervical adenocarcinoma, one (1.64%) was pleomorphic sarcoma, and 4 cases (6.55%) were undifferentiated carcinoma.

CONCLUSION

Lesions of the uterine cervix, nonneoplastic lesions were the commonest. Chronic non-specific cervicitis is the most common lesion of the uterine cervix. The endocervical polyp was the most common benign cervical lesion. Squamous cell carcinoma is the most common type of cervical carcinoma.

A Cross-Sectional Study on Work Place Violence among Junior Resident Doctors Working at Associated Hospitals of SMS Medical College, Jaipur

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INTRODUCTION

Workplace violence (WPV) is quite prevalent among all working institutions dealing directly with the public. Hospitals have a high incidence of workplace violence because they cater services related to the emotional aspects of the patient or relative. As per the Indian Medical Association, over 75% of doctors in India have faced some form of violence in their workplace. This study aimed to find out the proportion of workplace violence and the factors associated with it among junior resident doctors working at tertiary care hospitals in Jaipur.

METHODS

A hospital-based observational study was conducted among total of 621 junior resident doctors. A pre designed, pre-tested, structured questionnaire was used as a tool for data collection.

RESULTS

The majority of participants were male (62%) in the age groups 25-30 (80.5%). 57% of participants experienced workplace violence at their workplace, either physically or psychologically. In total, 9.01% and 55.7% of participants experienced physical and psychological WPV, respectively. WPV is significantly associated with a work-ing hour per week of participants (<0.05).

CONCLUSION

WPV can lead to a stressful working climate and it not only hurts physically but has a lasting impact on the morale, self-respect, confidence, and value system of the sufferer. Most WPV episodes are reported in emergency and critical care areas. Long waiting times and dissatisfaction with nursing care were the most important predisposing factors leading to workplace violence.

Histopathological Spectrum of Lesions in Gastrointestinal Endoscopic Biopsies in Jawahar Lal Nehru Medical College and Associated Group of Hospitals, Ajmer (Rajasthan)

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INTRODUCTION

Gastro-intestinal tumors including both benign and malignant tumors are the major cause of morbidity and mortality worldwide. Endoscopy in combination with endoscopic biopsy plays an important role in detecting early cancers and/or high-grade dysplasia and in the diagnosis of upper and lower gastrointestinal tract neoplasms and therefore aids in their early management.

METHODS

This study was done over a period of two years on all endoscopic biopsies samples received in the Department of Pathology at a tertiary care center.

RESULTS

Out of these 163 biopsies, stomach, esophageal, gastroesophageal junction, duodenal, ileal, colon, rectal, rectosigmoid accounted for 25%, 20.8%, 5.52%, 16.5%, 3.7%, 11.6%, 12.2%, 4.3% of cases, respectively. The mean age of patients was 51.91 ± 18.86 years and the highest incidence of GI disease was observed between the age group of 51-60 years. The M : F ratio was 1.46 : 1. Pain abdomen was the most common presenting symptom. Nonneoplastic lesions are more common than neoplastic lesions. The inflammatory lesion was the most commonly observed lesion followed by malignant lesions. The sensitivity of endoscopy is 96.25%, specificity is 68.67%, the positive predictive value is 74.76% and the negative predictive value is 95%. The accuracy for diagnosis by endoscopy is 82.21 %.

CONCLUSION

Endoscopic biopsy correlation reflects important advances in understanding the pathophysiology of disease and prognosis and survival rates after staging in the case of carcinomas. It provides diagnostic information and aids in improving patient management.

A Comprehensive Study of Histopathological Changes of Various Organs in Cases of Snakebite Poisoning in Jhalawar Region

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INTRODUCTION

Snakebite envenoming is an under-reported, ignored, morbid and fatal, though preventable in principle, and remains to be one of the common medical emergencies. The aim of this study was to assess the incidence, prevalence, and epidemiological profile, evaluate histopathological changes of various organs, and to identify and suggest all types of effective protective measures and spread awareness about safety in cases of fatal snakebite.

METHODS

All 30 cases with an alleged history of snakebite poisoning were brought for autopsy with the exclusion of another animal bite, decomposed bodies and patients with pre-existing chronic illness. Histopathological changes of various organs were studied microscopically in the Pathology department.

RESULTS

Most common victims were of 21-40 years of age, males being 6.67% and females being 63.33% and farmers were most commonly affected (46.67%). Most cases were from a rural background (70.0%) and married victims (83.33%) overall, while married females were 89.47% of cases. Maximum cases were during the day outdoors (86.36%) and at night were indoors (75.0%), in the rainy season were July to October (76.67%). Maximum victims (40.0%) were brought dead. The most common cause of death was respiratory failure (60.0%).

CONCLUSION

Snakebite poisoning should be prevented by using proper, prompt modern medicinal, and ASV treatment and not to misguide by orthodox solutions and by precautions like using full-length pants, shoes, long rubber gloves, clear grass fields, clean house premises, with detailed histopathology research and clinical advancements.

An Epidemiological Study of COVID-19 Positive Cases residing in Bikaner City, Rajasthan

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INTRODUCTION

Bikaner city is situated in the north-western part of Rajasthan, and reported 24567 COVID-19 positive cases and 246 deaths during the first COVID-19 wave. This study aimed to describe COVID-19 positive cases in Bikaner city on an epidemiological basis and find out the association between various factors and COVID -19 disease.

METHODS

This was a community-based cross-sectional study conducted on 1000 COVID-19, RT-PCR positive for COVID-19 cases. The information was collected, including sociodemo-graphic data, presenting symptoms, associated co-morbidities, outcomes, and health care management details. Epi Info software (7.2.5.0) was used for data analysis.

RESULTS

Out of the 1000 cases, three fourth were from 20-59 years of age, and 63.8% were males. The majority of these cases were from SES II (38.6%), Hindu community (94.6%), general castes (62%), and joint families (71.3%). The most common presenting symptoms were fever (91.6%), sore throat (90%), and cough (86%). The most common comorbidities were diabetes (11.50%) and hypertension (8.7%). The recovery rate was 95.3%, the case fatality rate was 2.7%, and 2% had post COVID-19 complications. The majority of cases were managed at home (76.60%), rest was hospitalized at CCC (15.00%), DCHC (4.90%), and DCH (3.50%). Association of outcomes with age, respiratory distress and one or more comorbidities was found to be statistically highly significant.

CONCLUSION

Age, respiratory distress, and one or more comorbidities were significant risk factors for the severity of disease and death.

Seroprevalence of *HBV* or *HCV* Coinfection in PLHIV and its Association with *HIV* Viral Load and CD4 Count at a Tertiary Care Centre in Western Rajasthan

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INTRODUCTION

Since the introduction of triple drug therapy for *HIV* patients, the life span of PLHIV has been increasing due to higher suppression of *HIV* viral load and better clinical outcomes. But this has been related to increased incidences of liver diseases due to hepatotoxicity associated with HAART. The aim of this study was to observe the incidence of hepatitis B virus (*HBV*) and hepatitis C virus (*HCV*) coinfections in HIV positive patients, its association with *HIV1* viral load, and the cluster of differentiation CD4+ T cell counts.

METHODS

A total of 413 sera from *HIV* seropositive patients were collected and processed for routine *HIV* viral load testing using the Abbott Real Time *HIV*-1 assay. The remaining sera samples were tested for Hepatitis B surface antigen, and anti HCV antibodies by ELISA. CD4+ T cell counts data was collected from the ART center through the proper channel.

RESULTS

Among the 413 patients, 28 (6.78%) were coinfecting with *HBV* and 02 (0.48%) with *HCV*. The median CD4+ T cell count of *HIV* mono infected patients was 385 cells/ μ l and the viral load was 1112 copies/ μ l. Median CD4+ T cell counts of 280 cells/ μ l for *HBV* coinfecting patients was less than *HIV* mono-infected patients. Viral load was higher in *HBV* coinfecting patients (1365 copies/ μ l) in comparison to *HIV* mono-infected patients.

CONCLUSION

HIV and *HBV/HCV* coinfection is an important health concern in western Rajasthan and all the *HIV* seropositive patients should be screened for *HBV/HCV* coinfection. Also, more focus should be given to *HIV* viral load estimation for regular monitoring of treatment outcomes in PLHIV.

A Prospective Study on Comparison of Urinary Cytology with Histopathological Examination in Bladder Transitional Cell Carcinoma

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INTRODUCTION

Urinary bladder tumor is the sixth most common tumor diagnosed worldwide. This study aimed to evaluate urinary cytology of the urine/urinary bladder biopsy samples and to correlate urine cytology with histopathology of bladder neoplasm.

METHODS

This study was a prospective hospital-based study including 55 cases attending OPD or admitted to the hospital with any genitourinary problems, whose urine sample urinary bladder biopsy sample/ radical cystectomy specimens were collected.

RESULTS

The mean age was 59.49 ± 14.58 years age range (22-88 years). According to The Paris System for Reporting a maximum of 54.55% were found negative, 34.55% atypical, and 10.90% suspicious for high-grade urothelial carcinoma. Out of 32, high-grade urothelial cell carcinoma, 13 had shown atypical cells on cytology, 4 were Suspicious for high grade and 15 were negative for high grade. Out of 21 low-grade urothelial cell carcinoma, 5 had shown atypical cells on cytology, 2 were suspicious for high grade and 14 were negative for high grade. Out of 2 papillomae, 1 had shown atypical cells on cytology, and one was negative for high grade. There was no association between age and sex with urothelial cell carcinoma.

CONCLUSION

Cytological examination of urine specimen is valuable as an aid in the diagnosis of bladder tumors. The accuracy is more with high grade tumors. Urine cytology is still considered useful tool in diagnosis and follow up of carcinoma bladder with high sensitivity but low specificity. Urine cytology is a good tool for the diagnosis of patients with bladder cancers.

Determination of the Age of Abrasions and Bruises according to Gross and Histopathological Findings: An Autopsy Based Study

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INTRODUCTION

The precise duration of injury plays a very crucial role in crime investigation. Wound healing occurs in a well-orchestrated sequence, consisting of inflammation, proliferation, and maturation. In this context, this study of wounds dating from gross and microscopic levels was undertaken.

METHODS

This study was conducted on a total of 197 samples (100 abrasions and 97 bruises) collected from 100 dead bodies during post-mortem examination. Gross examination of color change by the naked eye and microscopic examination by histopathological examination of abrasions and bruises were done.

RESULTS

Maximum cases belonged to 20 to 40 years of age. In abrasions bright red color showed up to 12 hours, brown scab after 22 hours, dark brown scab only after 40 hours, and black scab in more than 4 days old injuries. Scab falling off from margins took at least 5 days and scab fell off completely after 10 days. On microscopic examination, hemorrhage and congestion of vessels appeared in more than 14 hours, predominant neutrophil infiltration only after 18 hours, mononuclear cell infiltration in more than one day old, granulation tissue was seen after 72 hours and collagen tissue formation was observed after 4 days. In bruises on gross examination reddish color up to 2 days, bluish color from 10 minutes up to 8 days, brownish color in injuries of more than 42 hours old, whereas greenish color in more than a week old injury and yellowish color was observed in injuries of more than 12 days old.

CONCLUSION

The observations of the color change of injury and histopathological findings can help the forensic pathologist to a certain extent in dating the age of abrasions and bruises.

Histopathological Evaluation of Skin Biopsy in Leprosy

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INTRODUCTION

Leprosy is a granulomatous skin lesion caused by *Mycobacterium leprae* that predominantly affects cooler tissues such as skin and peripheral nerves. The present study aimed to explore the histopathological correlation of skin biopsy to arrive at a definitive diagnosis of leprosy and to classify the types of disease.

METHODS

The present study was conducted on 55 skin punch biopsies after clinical diagnosis. Inadequate and autolyzed biopsies were excluded. These biopsies were kept in 10% formalin and detailed clinical history, examination findings indicating signs and symptoms of the skin lesions.

RESULTS

The mean age of cases was 39.6 years. 60% cases with erythematous lesions followed by 27.27% hypopigmented lesions and 12.73% nodules. The majority of cases have tuberculoid leprosy (38.18%) followed by 20% has borderline tuberculoid leprosy, 14.55% have indeterminate leprosy, 10.91% have borderline leprosy, 9.09% has lepromatous leprosy and 7.27% has histoid leprosy. The majority of cases have lepra bacilli index negative (63.64%).

CONCLUSION

Leprosy has a wide morphological spectrum. Histopathology is helpful for typing leprosy specially using the Ridley-Jopling classification. In the present study, tuberculoid leprosy is the commonest type and needs to be carefully reported and demonstration of acid-fast bacilli yields a better report as well as helps the treatment plan according to national leprosy programs.

A Prospective Study on Profile of Suicidal Death Cases Brought for Post-mortem Examination at Mortuary of RNT Medical College, Udaipur

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INTRODUCTION

Suicides are a major public health problem causing significant morbidity and mortality throughout the world. The cause for these increased suicidal deaths may be due to rapid globalization, stressful lifestyle, decreased social sentiments, etc. The present prospective study is to determine the burden of mortality with regard to suicides and to determine the causative factors of suicides in our tribal and hilly region.

METHODS

A prospective study was conducted on all cases of alleged suicidal deaths autopsied. Information on various factors such as age, sex, religion, place of incidence, occupation, period of survival, the method adopted for suicide, the motive behind suicide, etc., were noted for each case in a separate proforma.

RESULTS

Among 1100 cases autopsied during the study period, 256 (23.27%) cases of alleged suicidal deaths were present. Out of the 256 cases of alleged suicidal deaths, peak occurrence was in the age group of 20-29 years (33.20%), male predominance was seen (65.23%), most of the victims were rural habitant (54.68%), and involved victims were literates (69.92%). The Hindu population was most affected (93.35%) and more cases were reported during the monsoon season (42.57%). The present study showed that laborers (23.05%) and housewives (19.53%) were the major victims and poisoning (50%) was the most preferred method adopted for suicide.

CONCLUSION

The younger generation especially males in rural areas are at severe risk of being a victim of suicide. The incidence of suicides being a preventable cause of death, its morbidity and mortality can be reduced by planning and implementing effective prevention strategies.

Study of Histopathological Spectrum of Oral Cavity Lesions

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INTRODUCTION

Oral cancer is one of the major health problems in some parts of the world, especially in developing countries. The present study is designed to study the histopathological spectrum of oral cavity lesions and compare the observed findings to similar studies with relation to age, sex, and site distribution, and study the relationship between ill-fitting dentures, tobacco chewing, and cigarette smoking with pathological lesions benign and malignant.

METHODS

The present study was undertaken to study the clinical, epidemiological, and morphological findings of oral cavity lesions on a total of 210 histopathological specimens of the oral cavity.

RESULTS

In present study, out of 210 cases, 19 cases (9.04%) are non-neoplastic, 31 cases (14.76%) are benign, 9 cases (4.28%) are precursor/premalignant and 151 cases (71.90%) are malignant. In the present study, buccal mucosa was the most common site affected in malignant neoplasm comprising 52.3%, followed by the tongue (35.5%), lip (5.7%), gingivobuccal sulcus (2.3%), alveolus (1.9%) retromolar trigone (0.9%), hard palate and jaw (0.4%). Out of 151 cases of oral malignant neoplasm, 34 cases (22.51%) gives the history of bidi/cigarette smoking, and 50 cases (33.11%) gave the history of tobacco chewing in form of Zarda/Gutakha/Betal, 67 cases (44.37) were with no factor exposure.

CONCLUSION

The majority of oral cavity lesions are malignant in nature. Squamous cell carcinoma is the most common type of oral malignancy. Most oral cancers are presented as ulceroproliferative growth and chronic non healing ulcer, diagnosis and management at an early stage reduces morbidity and mortality and improves overall survival.

Histopathological Trends of Male Breast Lesions over a Period of Two Years

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INTRODUCTION

Breast cancer in males is relatively uncommon, accounting for <1% of all breast cancers. Compared to females, the disease is less studied in males. Therefore, the present study was undertaken to study the histopathological trends of male breast lesions.

METHODS

This is a cross-sectional study to evaluate the two-year trends concerning male breast lesions, benign and malignant, with their histopathological particularities regardless of age group.

RESULTS

A total of 52 male patients were encountered out of which 5 (9.6%) were malignant and 47(90.6%) were benign. Among primary malignant lesion 4 patients (80%), only invasive ductal carcinoma (IDC)-NOS types were encountered and one patient was encountered as metastatic adenocarcinoma of the stomach whereas in the benign lesion, gynecomastia was predominant in 44 (84.60%) patients and 3 patients (5.8%) of lipoma were observed. The mean age of the malignant cases was 74 years with age ranging between 68-82 years. Estrogen and progesterone receptors were expressed in each case. There is a significant association between age group and type of lesion.

CONCLUSION

Male breast carcinoma is a rare entity with a poor prognosis and a high expression of hormone receptors. The male breast carcinoma has no histologic correlation with gynecomastia as observed in this study.

The Application of Milan System for Reporting Salivary Gland Cytology

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INTRODUCTION

Salivary gland lesions (SGL) represent 36% of all tumors of the head and neck region. FNAC is a minimally invasive and cost-effective procedure for salivary gland lesions. The Milan system organizes the diagnostic information from the FNAC into a uniform and pragmatic reporting terminology. This study aimed to classify cytological diagnosis of salivary gland lesions using the Milan system and ascertain the rate of malignancy using cyto-histopathological correlation.

METHODS

This is a three year observational study of all the FNAC samples of salivary gland lesions received in a tertiary health care center. Sensitivity, specificity, positive predictive value, negative predictive value and diagnostic accuracy were assessed using online Quick Calc Graph Pad software.

RESULTS

A total of 140 cases were included in the study of which histological follow-up was possible in 29 cases. The sensitivity, specificity, negative predictive value, and positive predictive value were 66.67%, 100%, 100%, and 96.30%, respectively. The overall diagnostic accuracy was 96.55%. As per Milan system, maximum cases were benign non-neoplastic (category II) (55.0%) followed by benign neoplastic (category IVA) (28.6%), non-diagnostic (category I) (7.9%), malignant (category VI) (2.9%), suspicious for malignancy (category V) (5.7%).

CONCLUSION

Milan's system of reporting salivary gland cytopathology increases the rate of diagnostic accuracy and helps to arrange vague, discrete reports. Thus, this system allows proper categorization of salivary gland lesions and allows the treating clinician and the pathologist to communicate effectively.

Study of IHC Markers ER, PR, Her-2 Neu in Breast Cancer and its Relation to Tumor Type and Grade

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INTRODUCTION

This study aimed to assess Immuno histo chemistry (IHC) markers estrogen receptor (ER), progesteron receptor (PR), and Her-2 neu in breast cancer cases in terms, of age distribution, laterality, type of specimen received, a histologic sub type with modified Bloom-Richardson (MRB) scoring and grade of tumor, lympho vascular invasion, necrosis, molecular sub type, nipple, and skin invasion and to evaluate tumor type and grade of the tumor with relation to ER, PR and Her-2 neu status (positive/negative).

METHODS

The cross-sectional study was carried out through paraffin blocks containing malignant tissue selected from histologically confirmed cases of breast cancer.

RESULTS

The age group of 30-50 years showed a higher incidence. Maximum cases were of modified radical mastectomy specimen of the left side in which most of the cases were of invasive duct carcinoma, moderately differentiated with MRB scoring of 6/9 and basal type of molecular type showing necrosis with maximum cases not showing skin and nipple invasion.

CONCLUSION

IHC classification as a clinical tool for ER/PR and Her-2 neu testing is widely available at a reasonable cost. This therapeutically informative classification of breast cancer based on immunophenotype, and is prognostic as well as some what predictive.