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Original Research Article

A clinicopathogical study on diabetic foot ulcer with special reference to the causative factors and its management

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ABSTRACT

Background: Diabetic ulcers are the most common foot injuries leading to lower extremity amputation. The present study was done to identify the incidence and related risk factors of diabetic foot ulcers in study participants.
Methods: This was a prospective done on 50 patients with diabetic foot ulcers. All the patients were examined thoroughly and related laboratory investigations were done. Wound culture and sensitivity was done in all cases.
Results: Mean age of onset with foot ulcers was 53.5 yrs in male and 55 yrs in females. Nephropathy was present in 12 (24%) patients. Sensorimotor neuropathy was present in 29 (58%) cases and autonomic neuropathy was present in 06 (12%) cases. Most common infection identified in diabetic foot ulcers was due to gram-negative bacteria (*E. coli* in 45 cases). Major amputation was done in 2 (4%) patients.
Conclusions: Implementation of management strategies at early stages prevents the development of complications related to diabetic foot ulcers in patients.

Keywords: Diabetic foot ulcers, Risk factors, Complications, Management

INTRODUCTION

Diabetic foot ulcer is one of the most common devastating complications of diabetes and is defined as a foot affected by ulcers associated with neuropathy or peripheral arterial disease of the lower limb in diabetic patients.[1] The incidence of diabetic foot ulcers is more common in elder diabetic patients. About 5% of diabetic population present with a history of foot ulcers and 15% of the diabetic patients developing foot ulcers as life time risk.[2-4]

Majority of the foot ulcers (60-80%) will heal while 10-15% remains active and 5-24% of them finally lead to amputation within a period of 16-18 months after the first assessment.[5] Neuropathic wounds are more likely to heal reported that foot ulcers leads to amputations approximately in about 85% of diabetic cases.[6]

Diabetic neuropathy is the common presenting factor in almost 90% of diabetic foot ulcers. Peripheral arterial disease is 2-8 times more common in patients with diabetes. Other risk factors include visual impairment, diabetic nephropathy, poor glycemic control and cigarette smoking.[7,8]

The infections of diabetic foot are polymicrobial in nature that involves both aerobes and anaerobes. The common are *E. coli, S. aureus, P. aeruginosa, Enterococcus* species.[9]

The current study was done to identify the risk factors

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Original Research Article

Clinicopathological study and management of benign biliary stricture

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ABSTRACT

Background: A stricture of the biliary tract can be one of the most difficult challenges that a surgeon can face. If unrecognized or managed improperly life threatening complications may develop. The goal of this study is to describe the most appropriate management for benign biliary stricture.
Methods: This was a prospective study done on 29 patients diagnosed with benign biliary stricture. Complete biochemical profile, USG-whole abdomen, and other radiological investigations were done to evaluate the detailed etiological condition of the patient. Appropriate surgical intervention was implemented in the patients. Related complications and clinical outcome was observed during the follow up period of 2 years.
Results: Mean age of the study population was 45 years (ranging from 22-62 years). Female preponderance was seen in the study. USG of abdomen was done in all the patients (100%). Overall complications were observed in 15 patients.
Conclusions: Benign biliary strictures occur more often in women. Complications and clinical outcome depends on the time of diagnosis, matured clinical judgment and appropriate surgical intervention. Hepaticojejunostomy (HJJ) was the common surgical procedure adopted in in 23 patients.

Keywords: Benign biliary stricture, Diagnosis, Complications

INTRODUCTION

Benign biliary stricture includes several diverse clinical entities that share the common characteristics of biliary obstruction. Many of these strictures result from iatrogenic injuries during cholecystectomy, bile duct exploration, pancreatic, gastric or hepatic surgery and liver transplantation.[1] It occurs often in young patients in the most productive years of life. Improper management may result in disastrous complications, such as recurrent cholangitis, biliary cirrhosis portal hypertension. Repeated interventions greatly reduce the likelihood of a successful outcome. It is therefore imperative that any attempt at repair be carried out in a precise and expert manner in the setting of a specialist center, as biliary in otherwise good health and are expected to live for years.[2]

The best results for management of biliary stricture are achieved through early diagnosis, mature clinical judgment and technical expertise at the first attempt of repair. Benign biliary stricture may affect the intrahepatic or extrahepatic bile ducts or both and may be solitary or multiple.[3]

The present study was done with the aim to evaluate the influence of several factors on the outcome of the repair of benign biliary strictures in order to identify the optimal technique for different grade of biliary strictures, with best possible technique and good long term result and

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Clinico-pathological and etiological evaluation of acute appendicitis and assessment of significance of laboratory and ultrasonography examination as an ancillary aid to clinical diagnosis

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ABSTRACT

Background: Timely diagnosis and intervention of acute appendicitis reduces morbidity and mortality associated with the disease condition. The study aimed to evaluate the etiology of acute appendicitis, to analyze the sensitivity of modified Alvarado scoring system and radiology in the diagnosis of acute appendicitis and to correlate the observations of laboratory tests, operative findings with the histopathological report of specimen of appendix.
Methods: This was a prospective study done on 100 patients with clinical symptoms of acute right lower abdominal pain suggestive of appendicular origin during the period from February 2015 to January 2016 in the department of surgery thorough clinical assessment, laboratory investigations, ultrasound findings as were done for all patients. After confirming the diagnosis of AA the patients had operative intervention and specimens were sent for histopathological study.
Results: Male preponderance was seen in the study. Majority of them belongs to 21 to 30 years age group (50%). Faecolith was the most common etiological factor observed (58%). Abdominal pain (100%) was the most common clinical symptom. Alvarado score had sensitivity of 95.74% and specificity of 66.67% in diagnosing AA. In correlation to histopathological findings, ultrasonography findings showed 100% positive visualization rate in all 71 cases. Elevated ESR (94%) had high diagnostic accuracy as confirmed by HPE finding (96.81%) which is statistically significant ($p<0.000$).
Conclusions: Alvarado scoring system, elevated ESR levels and USG findings of the appendix can be considered as adjuncts to clinically diagnose the AA, to improve the diagnostic accuracy thereby consequently the rate of negative appendicectomy can be reduced and thus decreases the complication rates.

Keywords: Clinico-pathology, Etiology, Acute appendicitis, Ultrasonography

INTRODUCTION

Acute appendicitis is a clinicopathological condition with severe abdominal pain. It is commonly seen in the second to fourth decade of life affecting about 7% of the population during their life time and woman (25%) are more likely affected than men (13%).[1] The diagnosis of the appendicitis based on the findings of physical examination and patients history.[2,3] One of the criteria for diagnosis based on clinical signs and examinations is the Alvarado standard, which includes symptoms (abdominal pain and migration, nausea and vomiting), signs (anorexia, tenderness and rebound tenderness, fever), and laboratory criteria (leukocytosis and left shift).[4] Timely diagnosis of appendicitis reduces the complication rate and mortality.[5]

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Original Research Article

Clinico-pathological study of liver abscesses with special reference to different treatment options

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ABSTRACT

Background: Liver abscess is a serious life threatening condition if left untreated. Most of them were amoebic in nature in tropical countries. The present study was done with the aim to assess the epidemiology of liver abscesses, to determine the fast, accurate and cost effective diagnostic approaches and to find out the best mode of management for amoebic liver abscess (ALA) and pyogenic liver abscess (PLA) in the study population.

Methods: This was a prospective study done at KPC Medical College and Hospital for a period of 2 years, from June 2013 to May 2015. A total of 50 patients diagnosed with liver abscess were included in the study. Patients were categorized into ALA and PLA cases based on the type of abscess cavity. Authors have studied correlation of socio-demographic factors with disease, etiology, diagnostic findings, types of treatment and their outcome in the study population.

Results: ALA was the most common type among the study groups (90%). Male preponderance was seen. Majority of them belongs to low-socioeconomic status (80%). The most common etiology of PLA was E. coli. Ultrasonography (USG) of the abdomen was accurate and cost-effective diagnostic procedure for assessing liver abscesses. Percutaneous catheter drainage was the most effective method of treatment (with a 100% success rate) in both ALA and PLA cases.

Conclusions: Most of the patients in the study had ALA and had a chronological association with alcohol addiction, diabetes and low-socioeconomic status. Rapid diagnosis of the condition (ALA and PLA) with USG will reduce the rate of morbidity and mortality in the patients.

Keywords: Catheter drainage, Liver abscess, Ultrasonography

INTRODUCTION

Liver abscess is potentially a life-threatening condition resulting from the invasion and multiplication of microorganisms either directly from injured blood vessels or by the biliary ductal system.[1,2] Abscess of liver were of many types. Among them amoebic liver abscess (ALA) and pyogenic liver abscess (PLA) were the most commonly seen in the population.[3] In tropical and subtropical countries, about 50-70% liver abscess cases were of amoebic in origin.[4] The common cause of PLA was biliary disease. The rate of incidence ranges from 1.1 to 2.3 cases per 1 lakh population every year and the common etiological factors are known to be the *Escherichia coli, Klebsiella* and *Streptococcus*.[5]

The diagnosis of liver abscess is confirmed by ultrasonography (USG), blood culture and abscess aspirate. Both ALA and PLA are found to be the important causes of morbidity and mortality in tropical countries. Conservative management with antibiotics is the main stay of treatment for ALA and PLA in initial