

Harsukh Educational Charitable Society

International Journal of Community Health and Medical Research

Journal home page: www.ijchmr.com

doi: 10.21276/ijchmr

ISSN E: 2457-0117 ISSN P: 2581-5040

Index Copernicus ICV 2018=62.61

ORIGINAL ARTICLE

To determine cases of ascites patients admitted to medicine ward

Arshad Hussain Bhat

MD Medicine PHC Qazigund, Distt. Anantnag, Jammu and Kashmir.

ABSTRACT:

Background: Ascites refers to the detectable and pathologic collection of fluid in the peritoneal cavity. The present study was conducted to determine cases of ascites admitted to medicine ward. **Materials & Methods:** The present study was conducted on 86 patients of ascites of both genders. Parameters such as icterus, parotid swelling, and signs of ascites and investigations profiles like viral markers (HBV; HCV), bilirubin level, albumin level, and abdominal ultrasound were collected. **Results:** There were 56 males and 30 females. The risk factors in patients were diabetes in 34, blood transfusion in 45 and alcohol ingestion in 51. The difference was non-significant ($P > 0.05$). Physical findings were murmur in 13, elevated JVP in 15, pleural effusion in 34, peripheral edema in 23, icterus in 45, axillary hair loss in 12, gynecomastia in 11 and palpable liver in 17. The difference was significant ($P < 0.05$). **Conclusion:** Authors found that common risk in patients were diabetes, blood transfusion and alcohol ingestion.

Key words: alcohol, Ascites, Diabetes

Corresponding author: Dr Arshad Hussain Bhat, MD Medicine PHC Qazigund, Distt. Anantnag, Jammu and Kashmir.

This article may be cited as: Bhat AH To determine cases of ascites patients admitted to medicine ward. HECS Int J Comm Health Med Res 2019; 5(4)74-76.

INTRODUCTION

In clinical practice, the term 'ascites' refers to the detectable and pathologic collection of fluid in the peritoneal cavity. Usually it is a clinical finding and can be confirmed by a diagnostic paracentesis. Subclinical amount of fluid (i.e., less than 1.5 litre) can be detected using ultrasonography or computed tomography of the abdomen.¹ Chronic liver disease with portal hypertension, congestive cardiac failure, tuberculosis and malignancy are important causes of ascites. However, it can occur secondary to a number of pathological conditions. In the case of refractory ascites, median survival does not exceed 6 mo, which is due to the development of severe complications including hyponatremia and progressive renal failure.² The most unfavorable predictors are hyponatremia, arterial hypotonia, high serum creatinine, low urine sodium level, spontaneous bacterial peritonitis, low total protein concentration in the ascitic fluid (≤ 2 g/dL), and the number of red blood cells in the ascitic fluid of more than 10,000/mm.³

In a large number of patients, cirrhosis of liver is the cause of ascites. Several factors contribute to the development of ascites in chronic liver disease. Kidney plays a central role and is responsible for sodium and water retention, through complex mechanisms.³ The mechanism by which the diseased liver affects

renal function is not fully understood. The 'peripheral arterial vasodilatation hypothesis' proposed in 1988 is based on the presence of characteristic circulatory abnormalities seen in cirrhotic patients. These patients show manifestations of increased cardiac output, arterial hypotension, decreased peripheral vascular resistance and splanchnic vasodilatation.⁴ The present study was conducted to determine cases of ascites admitted to medicine ward.

MATERIALS & METHODS

The present study was conducted in department of Internal Medicine. It comprised of 86 patients of ascites of both genders. All were informed regarding the study and written consent was obtained. Ethical clearance was taken from institutional ethical committee.

General information such as name, age, sex etc. was recorded. A general physical examination was performed in all patients. Parameters such as icterus, parotid swelling, and signs of ascites and investigations profiles like viral markers (HBV; HCV), bilirubin level, albumin level, and abdominal ultrasound were collected. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 86		
Gender	Males	Females
Number	56	30

Table I, graph I shows that there were 56 males and 30 females.

Graph I Distribution of patients

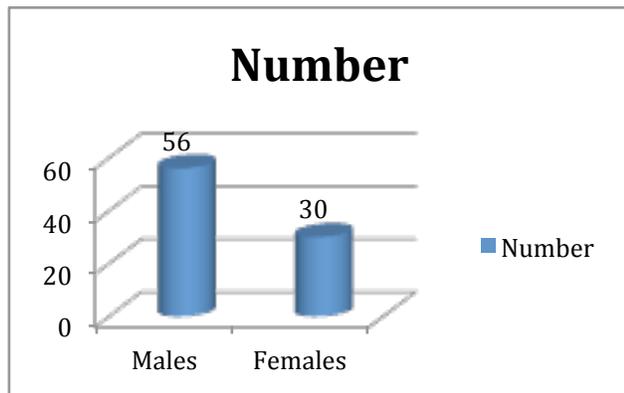


Table II Risk factors of ascites

Risk factors	Number	P value
Diabetes	34	0.12
Blood transfusion	45	
Alcohol ingestion	51	

Table II, graph II shows that risk factors in patients were diabetes in 34, blood transfusion in 45 and alcohol ingestion in 51. The difference was non- significant (P> 0.05).

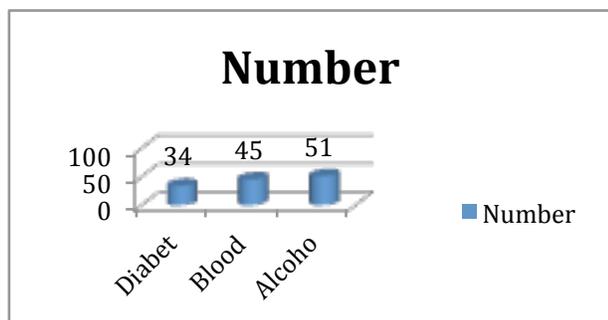


Table III Physical findings

Physical findings	Number	P value
Murmur	13	0.01
Elevated JVP	15	
Pleural effusion	34	
Peripheral odema	23	
Icterus	45	
Axillary hair loss	12	
Gynactomastia	11	
Palpable liver	17	

Table III shows that physical findings were murmur in 13, elevated JVP in 15, pleural effusion in 34, peripheral odema in 23, icterus in 45, axillary hair loss in 12, gynactomastia in 11 and palpable liver in 17. The difference was significant (P< 0.05).

DISCUSSION

Possible causes for vasodilatation in ascites include portosystemic shunting and/or impaired clearance of vasodilator substances like nitric oxide, endotoxins, prostacyclin, glucagon and adenosine.⁵ This peripheral and splanchnic vasodilatation is perceived as reduction in effective plasma volume. The effective hypovolemia brings into play the baroreceptor mediated activation of renin - angiotensin - aldosterone system and sympathetic nervous system which produce renal vasoconstriction and salt.⁶

In patients with ascites, renal secretion of prostaglandins, particularly PGE2 may help to preserve renal function by maintaining glomerular filtration and free water clearance. When this renal PGE2 production falls, perhaps due to renal deficiency of the precursor arachidonic acid, renal function deteriorates.⁷ Drugs which inhibit prostaglandin synthetase e.g., NSAIDs may lead to deterioration of renal function and should be avoided in these patients. Other factors that contribute to ascites formation in cirrhosis are decreased oncotic pressure of plasma due to impaired albumin production by the liver; portal hypertension which localizes the fluid within the peritoneal cavity; and an increased production of hepatic lymph due to post-sinusoidal obstruction by the hepatic nodules.⁸ The present study was conducted to determine cases of ascites admitted to medicine ward. In present study, there were 56 males and 30 females. Runyon et al⁹ found that a total of 52 patients were included. Thirty (57.7%) of them were males and the majority (77%) of the participants were fifty years old or younger. The mean age was 43.8 (± 14). The majority (86.5%) of the participants were from a rural area. Thirty-eight (73%) patients take alcohol occasionally while 11(21.2%) patients take alcohol frequently or massively. Eight (15.4%) patients reported a history of multiple sexual partners. Herbal medicine use was reported by 28 patients (53.8%). Only 5 (9.6%) patients were overweight. Chronic liver disease (CLD) was the major cause of ascites in this study in 24 (46.2%) patients. The other main causes of ascites were heart failure from various causes (19.2%), tuberculosis and hepatosplenic schistosomiasis contributing to 11.5% each and chronic kidney disease (5.8%). Five (20.8%) CLD patients had spontaneous bacterial peritonitis as a complication. Five (20.8%) and 4 (16.7%) CLD patients had hepatocellular carcinoma and hepatic encephalopathy as complications, respectively. Nine (17.3%) patients had variceal bleeding; six of the patients were diagnosed to have CLD while the remaining patients were having hepatosplenic schistosomiasis. We found that risk factors in patients were diabetes in 34, blood transfusion in 45 and alcohol ingestion in 51. We found that physical findings were murmur in 13, elevated JVP in 15, pleural effusion in 34, peripheral odema in 23, icterus in 45, axillary hair loss in 12, gynactomastia in 11 and palpable liver in 17.

In order to determine the cause of ascites formation, diagnostic paracentesis with the ascitic fluid analysis is recommended for all

patients with cirrhosis and first diagnosed ascites of the second or third stage in the case of ascites progression. Ascitic fluid analysis is also recommended for patients hospitalized because of other complications of cirrhosis, in particular, suspected spontaneous bacterial peritonitis. Moreover, it is necessary for differential diagnosis between spontaneous bacterial peritonitis and peritonitis caused by acute surgical diseases of the abdominal cavity.¹⁰

CONCLUSION

This is found that common risk in patients were diabetes, blood transfusion and alcohol ingestion.

REFERENCES

1. Bataller R, Arroyo V, Gines P. Management of ascites in cirrhosis. *J of Gastroenterol & Hepatology* 1997; 12: 723-33.
2. Jalan R, Hayes PC. Hepatic encephalopathy and ascites. *Lancet* 1997; 350: 1309-15.
3. Schrier RW. Pathogenesis of sodium and water retention in high-output and low-output cardiac failure, nephrotic syndrome, cirrhosis, and pregnancy. *N Engl J Med* 1988; 319: 1127-34.
4. Runyon BA, Hoefs JC, Morgan TR. Ascitic fluid analysis in malignancy related ascites. *Hepatology* 1988; 8: 1104-09.
5. Press OW, Press NO, Kaufman SD. Evaluation and management of chylous ascites. *Ann Intern Med* 1982; 96: 358-64.
6. Cattau EL Jr, Benjamin SB, Knuff TE, Castell DO. The accuracy of the physical examination in the diagnosis of suspected ascites. *JAMA* 1982; 247: 1164-66.
7. Chongtham DS, Singh MM, Kalantri SP, Pathak S. A simple bedside manoeuvre to detect ascites. *Natl Med J Ind* 1997; 10: 13-4.
8. Runyon BA. Paracentesis of ascitic fluid: a safe procedure. *Arch Intern Med* 1986; 146: 2259-61.
9. Runyon BA. Care of patients with ascites. *N Engl J Med* 1994; 330: 337-42.
10. Runyon BA, Montano AA, Akriviadis EA, et al. The serum ascites albumin gradient is superior to the exudate-transudate