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Case Report

ALCOHOLIC PANCREATITIS – AN ALARMING DEMOGRAPHIC TREND IN LOW SOCIO-ECONOMIC STRATA

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ABSTRACT

In our study we found out that the average age of patients presenting with acute alcoholic pancreatitis has significantly gone down from the early 40's to early 30's. The age of starting to drink shows a downward trend with the lowest being 12 years and a median age of 23 years. The reasons for drinking alcohol were mainly peer pressure and work and family related stresses. Easy availability, illiteracy, ignorance added to the alcohol drinking habit. our patients all came from low socio-economic strata as our hospital caters mainly to the poor, low socio-economic group by offering free medical service. All the patients were male, which we attribute to social constraints and fear among women. The type of alcohol was not significant but the quantity consumed at one sitting was significant (180 ml). Majority of patients (76%) resisted efforts at de-addiction by not attending psychiatric counseling sessions.

Keywords: *Alcoholism, Pancreatitis, Age of Starting to Drink, Quantity of Alcohol, Socio-Economic Status*

INTRODUCTION

The association of alcohol abuse with pancreatic injury was noted as early as 1878 (Minoti et al., 1997). The damage caused by alcohol to the pancreatic tissue has now been well established and documented (Roberts et al., 2013)[3]. Clinicians are in agreement that both, acute and chronic alcoholic pancreatitis, are responsible for a significant amount of death and disease in our country. The use of alcohol as a social activity has gradually changed to a daily necessity, not just in urban but rural areas too. Free availability of alcohol, disposable income, peer pressure, survival stresses are leading to increasing number of young men and women to take to drinking alcohol which eventually becomes an addiction wreaking havoc on the body, especially pancreas, almost always irreversibly. During the last few years we are noticing a gradual increase in the number of patients getting admitted to our hospital with acute or chronic pancreatitis and a positive history of alcohol consumption.

The present study was conducted as a retrospective study on 50 cases of alcoholic pancreatitis to study the change in the demographic pattern in the presentation of alcoholic pancreatits admitted in our hospital, Smt. Kashibai Navale Medical College and Hospital, Pune during the period November 2013 to March 2014.

MATERIALS AND METHODS

50 cases admitted to this hospital, Smt. Kashibai Navale Medical College and Hospital which caters mainly to poor socio-economic class of the society, with acute or chronic pancreatitis with a positive history of alcoholism between the periods of November 2013 to March 2014 were selected.

Standard protocols for diagnosis by history, routine and specialized investigations like Serum amylase and Lipase, CT/ USG Abdomen for confirmation were followed.

A detailed history of alcohol consumption that included age of starting to drink, daily amount of consumption, time interval of starting to drink and first attack of pancreatitis, attempts at de-addiction , withdrawal attacks etc were taken on a proforma which also included the detailed history, investigations done, treatment given.

Inclusion Criteria

All cases of diagnosed as pancreatitis, acute or chronic with a positive history of alcohol consumption, or found to have a positive history after detailed history taking from patient or close relatives/friends.

Alcohol consumption > 180 ml/day.

Exclusion Criteria:

All cases of pancreatitis secondary to cholelithiasis, idiopathic or any cause other than alcohol induced pancreatitis.

Methods of Analysis

Standards descriptive statistical method used.

RESULTS

The results of our study were calculated according to the demographic pattern. The median age of drinking was found to be 34 years (mean-35.72, standard deviation -7.945 years, range-23 to 55 years). The median age of starting to drink alcohol was 23 years (mean age- 23.52, std deviation -4.8 years, range -12-32 years), median age at the first attack of pancreatitis was 32 years, (mean-33.08 years, std deviation-6.689 years, range-20-48 years). Total years of alcohol consumption, median-10 years, mean-12.03 years, std deviation- 1.339 years, range-0.8-33 years. All the patients belonged to low socio-economic status. 24 patients were school drop-outs, 08 had completed education upto matriculation, 12 had completed higher secondary education and only 06 were graduates. 30 patients worked as manual labourers, 20 were employed in service. 22 said they took to drinking because of peer pressure, 08 due to work and family related stress, 12 due to easy availability and 08 drank just for fun.

32 patients drank on a daily basis, 12 drank more than four times a week and 06 were occasional drinkers. The average quantity consumed at one sitting was found to be 180 ml, mean – 226.8 ml, std deviation-58.79 ml, range 180 ml- 360 ml. 26 patients drank country made hard liquor, 20 drank English liquor, 04 drank both types of alcohol.

Only 12 patients attended the psychiatric counseling while 38 did not

Table for pattern of Alcohol consumption

Sr No	Parameter	Mean	Median	Std Deviation	Range
1)	Age	35.72 years	34 years	7.945 years	23to 55 years
2)	Age when alcohol started	23.52 years	23 years	4.874 years	12 to 32 years
3)	Age at Ist attack of pancreatitis	33.08 years	32 years	6.689 years	20to 48 years
4)	Total years of alcohol consumption *	12.03 years	10 years	1.339 years	8 months to 33 years
5)	Quantity of alcohol consumption at one sitting	226.8 ml	180 ml	58.79 ml	180 to 360 ml

Reason for drinking alcohol

1)	Peer Pressure	22
2	Easy availability	12
3	Stress	08
4	Experimentation	08

Educational Status

1)	School Dropouts	24
2)	Matriculation	08
3)	Higher Secondary	12
4)	Graduates	06

Occupation

1)	Manual Labour	30
2	Service	20

Frequency of Alcohol consumption

1)	Occasionally	06
2)	Daily	32
3)	Frequently	12

Psychiatric counseling

1)	Yes	12
2	No	38

DISCUSSION

In this study an attempt was made to study the demographic trends of acute or chronic alcoholic pancreatitis in our hospital catering to the low socio-economic strata. With easy availability of alcohol, peer pressure, pressures of survival, especially for the low socio-economic strata, illiteracy& ignorance, the patients coming to our hospital were of younger age group than mentioned in the literature (Minoti et al., 1997). Detailed history into the habit of alcoholism revealed startling factors, especially the lowering of age when the patient first started drinking, the quantity of alcohol consumed in one sitting and the frequency with which the patient consumed alcohol. All our patients were male indicating social constraints on women taking to drinking alcohol or fear of admitting to consuming alcohol (Roberts et al., 2013).

The age of first attack of acute alcoholic pancreatitis has significantly lowered as has the number of years between starting to drink and the first attack. In our study the median age of first attack was 32 years and median age for starting to drink was 23 years giving a median interval of 9 years between starting to drink and first attack of acute pancreatitis. The literature quotes age incidence between 35-54 years (Roberts et al., 2013) and early 40s (Minoti et al., 1997) in males.

A survey of literature reveals considerable geographic variation in the patterns of alcohol consumption with alcoholic pancreatitis. In France and Sweden (Sarles, 1971; Gastard et al., 1973; Kager et al., 1972) patients of alcoholic pancreatitis are reported as consistent heavy drinkers. In the USA, Scotland, South Africa, Austalia (Phillips, 1954; Marks et al., 1973; Imrie, 1974; Boyer and Mackay, 1960; Bennett and Jepson, 1966) about drinking is said to be more prominent as a cause of alcoholic pancreatitis. In our study we found that 64% were daily drinkers consuming on an average 180-360 ml of alcohol in one sitting. The mean quantity consumed was 226.8 ml. Our criteria for heavy drinking was quantity more than 180 ml per day (Minoti et al., 1997).

The type of alcohol appears to be unimportant in most studies (Sarles, 1971; Gastard et al., 1973; Kager et al., 1972; Marks et al., 1973).

In our study 52% patients consumed country liquor and the rest were into English liquor.

A significant finding in our study was the resistance to psychiatric counseling for de-addiction. 64% patients refused psychiatric help (WHO, 2004).

Our retrospective study of the demographic trends of alcoholic pancreatitis revealed a lowering of the age when the patients start drinking leading to an early age of the first attack of acute alcoholic pancreatitis and reduction in the time interval between starting to drink and first attack of alcoholic pancreatitis. Low socio-economic status, illiteracy, social pressures, easy availability all contribute to the young patients gradually taking to heavy drinking causing deleterious effects on pancreas, permanently affecting their health. With younger patients getting admitted for this ailment fraught with long-term morbidity, it is a severe economic drain on the family and a loss of productivity of the person to the society in which he lives. The resistance to help in the form of psychiatric counseling is alarming.

Limitations and Strengths

Our study of 50 cases of alcoholic pancreatitis admitted to our hospital in a period of 6 months is just an indicator of changing demographic patterns of the disease and changing social values. We need to study a larger sample for a longer period of time to firmly establish the change. We are going to continue to follow this study.

The strength of our study is that we have picked up an alarming trend in the young population of our society affecting their health and productivity. Corrective measures will definitely help to curb this trend.

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