# Effect of Duration of Biliary Patenting on Quality of Life in patients with Obstructive Jaundice

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#### **ABSTRACT**

Aim: Effects of duration of biliary patenting on quality of life in patients suffering from obstructive jaundice.

**Methodology:** A case control study in OPD of general surgery, Unit-1, Civil Hospital, Karachi, by using non-probability consecutive sampling technique. The sample size is 195 subjects with the age of 20-80 years for both the genders. Ethical approval was taken from the concerned department. 105 patients had a duration upto 12 months since biliary patenting whereas 90 patients had duration >12 months since biliary patenting.

**Results:** Mean duration since biliary patenting was 11.9±3.7 months whereas 105 (53.8%) of them had biliary patenting within last one year while 90(46.2%) of them had biliary patenting over a year ago. Moreover, their mean total SF-36 quality of life score was 55.2±12.5. There was a statistically significant effect of duration since biliary patenting on quality of life of obstructive jaundice patients (p<0.01) where patients who had biliary patenting within the last year had significantly higher SF-36 QOL scores than patients who had biliary patenting >one year ago.

Conclusion: In obstructive jaundice, quality of life was observed more better in those patients who had a duration upto 12 months than those who had duration >12 months since biliary patenting

Keywords: Obstructive jaundice, Bile duct obstruction, malignant, polyp.

## INTRODUCTION

Bile duct obstruction is caused by malignancies i.e. cholangiocarcinoma, hepatocellular carcinoma, carcinoma of gallbladder, carcinoma of ampulla and pancreatic cancer, and metastatic tumors with constant compression of the common bile duct<sup>1,2</sup>. Obstructive jaundice is usually related to severity of infection with an occurrence of upto 40% patients suffering from jaundice need ICU.<sup>3</sup> The risk factors related to obstructive jaundice differ in different countries of the world along with pancreatic tumor which is being reported that it happens due to the bile duct stones.<sup>4</sup>

#### **METHODOLOGY**

This case control study was carried out in OPD of general surgery, Unit-1, civil hospital, Karachi by using non-probability, consecutive sampling technique. The study was started after taking approval from ethical review committee. The sample size was 195 subjects with the age of 20-80 years. 105 patients had a duration upto 12 months since biliary patenting whereas 90 patients had a duration >12 months since biliary patenting. Demographic data was obtained. Quality of life was measured using SF-36. Data was analyzed using SPSS version 21.

#### **RESULTS**

Table 1: Duration of Biliary Patenting and Quality of Life

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Quality of	Duration since Biliary Patenting		Mann-Whitney U		
Life	Up to 12 months	> 12 months	Mann-Whitney U test/ p-value-		
N	105	90	tesu p-value-		
Physical function					
Mean± SD	60.08±15.81	46.45±14.32	<0.01*		
Median[IQR]	60.69[72.04-49.07]	43.71[56.93-34.33]			
Max – Min	94.27-25.3	86.02-25.45			
Role-physical					
Mean± SD	62.12±16.38	45.98±14.18	<0.01*		
Median [IQR]	64.9[75.98-49.32]	43.7[56.54-35.31]			
Max – Min	89.18-26.43	83.7-25.29			
Body pain					
Mean± SD	66.64±17.06	52.86±14.85			
Median [IQR]	68.43[81.06-5.52]	51.78[62.73-42.03]	<0.01*		
Max – Min	93.39-25.24	89.16-25.18			
General health					
Mean± SD	53.66±12.49	42.3±11.74	<0.01*		
Median [IQR]	54.5[62.01-45.12]	40.28[50.23-32.52]			

Max – Min	87.01-25.88	78.88-25.59			
Vitality					
Mean± SD	59.81±15.85	45.9±14.22			
Median [IQR]	59.15[72.13-47.08]	43.8[54.45-35.11]	<0.01*		
Max – Min	94.44-25.88	91.47-25.15			
Social function					
Mean± SD	66.95±15.37	53.94±14.43	<0.01*		
Median [IQR]	68.92[76.79-59.76]	53.47[61.92-41.92]			
Max – Min	93.41-27.27	91.61-29.68			
Role emotional					
Mean± SD	64.89±17.7	50.77±15.62	<0.01		
Median [IQR]	68.08[78.65-49.71]	49.23[62.41-37.1]			
Max – Min	93.54-28.5	83.9-25.31			
Mental health					
Mean± SD	57.68±15.69	44.87±12.43	<0.01*		
Median [IQR]	57.03[66.54-43.46]	42.32[54.35-35.22]			
Max – Min	94.66-28.76	77.97-25.08			
Total SF-36-Qol Score					
Mean± SD	61.48±11.42	47.88±9.37			
Median [IQR]	59.77[67.71-54.89]	49.21[54.36-41.78]	<0.01*		
Max – Min	92.2-33.32	66.05-26.32			

### **DISCUSSION**

In a study by Iqbal et al $^5$  reported that occurrence of obstructive jaundice is more common among middle aged patients. Our study was comparable with the above mentioned study showing that out of total 195 patients, 98(50.3%) were males whereas 97 (49.7%) of them were females with the mean age 55.9  $\pm$  15.4 years showing obstructive jaundice was more common amongst middle aged patients.

Chalya PL et al<sup>6</sup> reported that the mean age was 42.6 years and in case of malignancy, it was 58.6 years. In our study, the mean age was not based on benign and malignant causes. In another study<sup>7</sup>, 56.7% were females and 43.3% were males and benign causes were predominant in both males (34/65) and females (47/85) than malignant causes of obstructive jaundice. Our results were inconsistent with the above mentioned results and do not base on the benign and malignant causes of obstructive jaundice with respect to gender.

Received on 11-06-2021 Accepted on 22-11-2021

#### CONCLUSION

Incidence of obstructive jaundice was observed equally in both the genders and quality of life was found more improved in those patients who had a duration up to 12 months as compared to those who had duration >12 months with biliary patenting.

Conflict of interest: Nil

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