

Factors Influencing Screening of Family Members Among Index Cases of Chronic Hepatitis B

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Objectives: A recent survey of hepatitis B (HBV)-infected patients showed that 28% didn't know the HBV status of their immediate family members. Factors influencing family member screening are unknown. We aimed to determine the proportion of patients who follow the doctor's advice to have family members screened and to determine factors influencing this among index HBV cases.

Methods: Consecutive HBV-infected patients in a single outpatient hepatology clinic from February 2007-October 2017 with at least 1 follow-up clinic visit were included. Patients were advised to have family members screened for HBV during each visit.

Results:

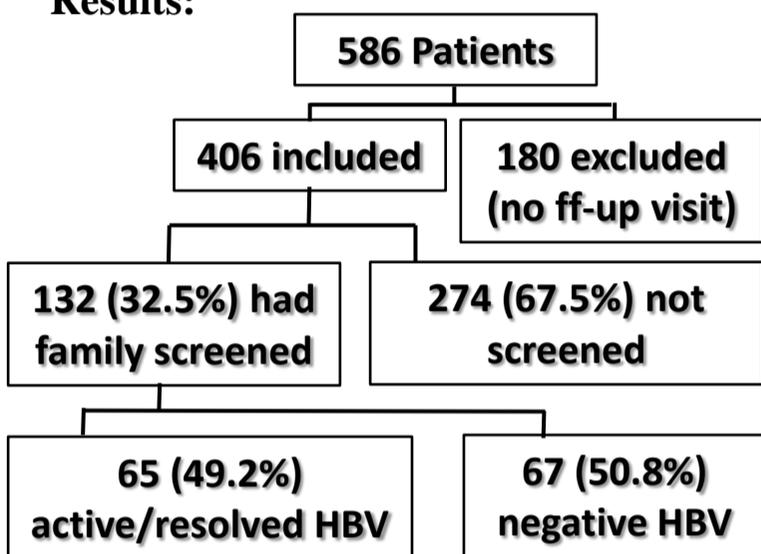


Table 1: Clinical & Biochemical Characteristics

Variable	Family Screened	Not Screened	P value
Age	38.2±40.3	44.4±26.2	0.063
Male sex	76 (57.6%)	179 (65.3%)	0.154
HCC on initial visit	14 (10.6%)	66 (24.1%)	0.005
HBeAg (n=400)	46 (34.8%)	70 (26.1%)	0.079
HBV DNA (n=256)	7.3±7.6	7.5±8	0.253
ALT (n=402)	135.8±430.3	147.6±411.7	0.791
AST (n=352)	92.5±193.9	103.1±266.8	0.702
INR (n=338)	1.1±0.5	1.1±0.3	0.329
Platelets (n=366)	228.1±96.6	230.3±89.4	0.824
Fam. history HBV	76 (58%)	112 (42.1%)	0.004
Fam. history liver dse.	74 (56.1%)	111 (41.7%)	0.005
Fam. history HCC	21 (16%)	30 (11.3%)	0.122
Number of clinic visits	5.4±5.4	4.3±4	0.035
Reason for HBV check:			
Family history HBV	17 (12.9%)	23 (8.4%)	<0.001
Incidental	100 (75.8%)	172 (62.8%)	
Jaundice/ALT flare	15 (11.4%)	79 (28.8%)	

Figure 1: Patient Flow Chart

Patients who were more likely to have their family members screened were those with a family history of any liver disease or HBV while patients who had their HBV checked because of jaundice/liver mass and patients who already had HCC on the initial visit were less likely to have family members screened. Expectedly, patients who had a greater number of clinic visits were more likely to have their family members screened. In contrast, neither the patient's age, gender, liver enzymes, liver function tests and HBV laboratory markers were factors.

Independent predictors for family member screening were family history of liver disease (p=0.026), number of clinic visits (p=0.033), and patients' reasons for having themselves checked for HBV (Jaundice/liver mass) (p=0.014).

Conclusions: Despite frequent reminders to have their family screened, only a minority will follow this recommendation. It appears that the strongest influence to have a family member screened is the presence of other family members having liver disease. Patients with jaundice or ALT flares, or with HCC may be too pre-occupied with their condition to remind family members of the need for screening.