

**CHAPTER 10**

**HEPATITIS ON DIALYSIS**

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The prevalence of Hepatitis B infection has remained unchanged over the years, and was quite similar between HD and CAPD patients. Nosocomial transmission within the HD unit remained the main culprit for the much higher prevalence of HCV infection in HD as compared to CAPD patients. However with the effective and more stringent implementation of infection control measures, HCV prevalence showed a decreasing trend with a 9% decline in prevalence from 2001 onwards.

**Table 10.1:** Prevalence of positive HBsAg and positive Anti-HCV at annual survey, HD patients 1997-2005

Year	No. of subjects	Prevalence of HBsAg+ (%)	Prevalence of Anti-HCV+ (%)
1997	1694	6	23
1998	2139	6	22
1999	2991	6	23
2000	4386	6	25
2001	5187	6	23
2002	6106	5	20
2003	6999	5	19
2004	7618	5	17
2005	8757	4	14

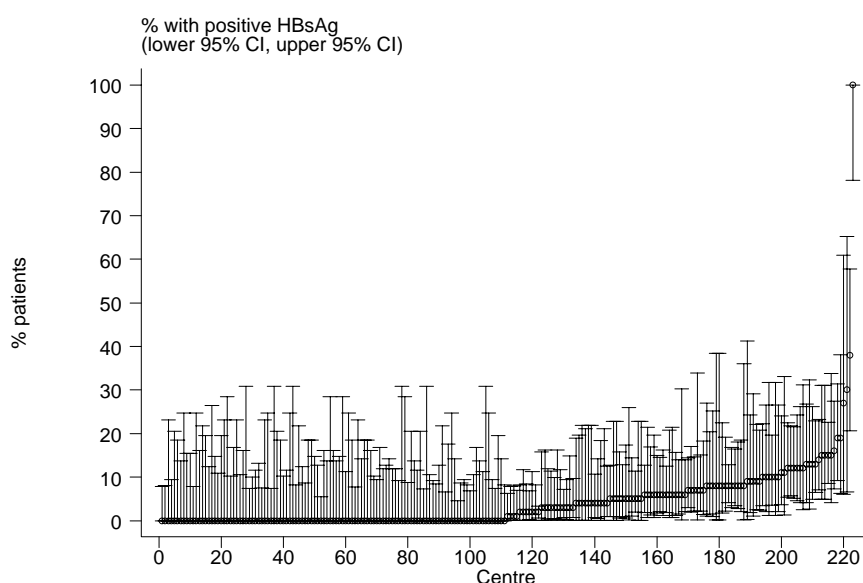
**Table 10.2:** Prevalence of positive HBsAg and positive Anti-HCV at annual survey, CAPD patients 1997-2005

Year	No. of subjects	Prevalence of HBsAg+ (%)	Prevalence of Anti-HCV+ (%)
1997	476	3	5
1998	541	3	6
1999	610	2	5
2000	662	2	5
2001	781	2	3
2002	891	3	4
2003	1229	3	4
2004	1201	4	5
2005	1317	4	5

**Table 10.3:** Variation in Proportion of patients with positive HBsAg at annual survey among HD centres, 2005

Year	No. of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
1997	46	0	0	1	5	9	17	19
1998	51	0	0	0	5	9	18	23
1999	76	0	0	0	4.5	9.5	19	30
2000	110	0	0	0	4	9	15	80
2001	125	0	0	0	5	9	14	90
2002	153	0	0	0	3	8	13	21
2003	173	0	0	0	3	7	15	64
2004	192	0	0	0	3	7	14	100
2005	223	0	0	0	1	6	14	100

**Figure 10.3:** Variation in Proportion of patients with positive HBsAg among HD centres, 2005



In general, the proportion of hepatitis B positive patients did not vary widely between centers. 111 centers (50%) had no hepatitis B positive patients (table and figure 10.3). This may be due to several reasons:

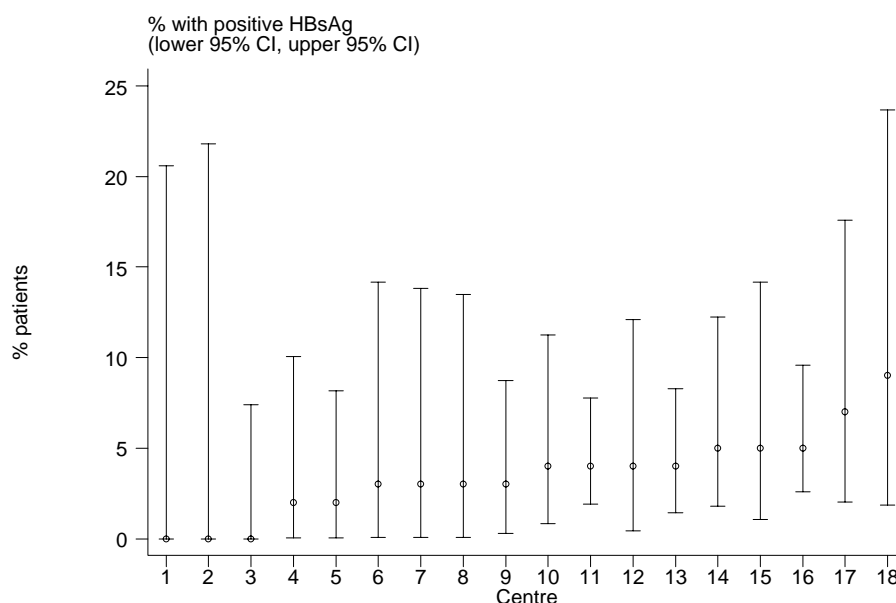
1. Some centers especially smaller ones practice the policy of not accepting Hepatitis B infected patients.
2. Early hepatitis B immunization in chronic kidney disease (CKD) patients resulted in lower rates of Hepatitis B infected patients starting dialysis.
3. Total segregation of Hepatitis B positive patients and routine vaccination of HD patients have further reduced the risk of acquiring the infection while on dialysis.

As the risk of cross infection is negligible in CAPD, the prevalence of Hepatitis B infection in CAPD patients was low with no significant variation among the various centres. (Table and figure 10.4)

**Table 10.4:** Variation in Proportion of patients with positive HBsAg at annual survey among CAPD centres, 2005

Year	No. of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
1997	7	0	0	0	2	3	8	8
1998	9	0	0	0	1	3	6	6
1999	10	0	0	0	2	2	4	4
2000	11	0	0	0	1	5	5	5
2001	12	0	0	0	2	3	9	9
2002	14	0	0	1	3	5	14	14
2003	18	0	0	2	3.5	6	8	8
2004	18	0	0	1	3	6	11	11
2005	18	0	0	2	3.5	5	9	9

**Figure 10.4:** Variation in Proportion of patients with positive HBsAg among CAPD centres, 2005

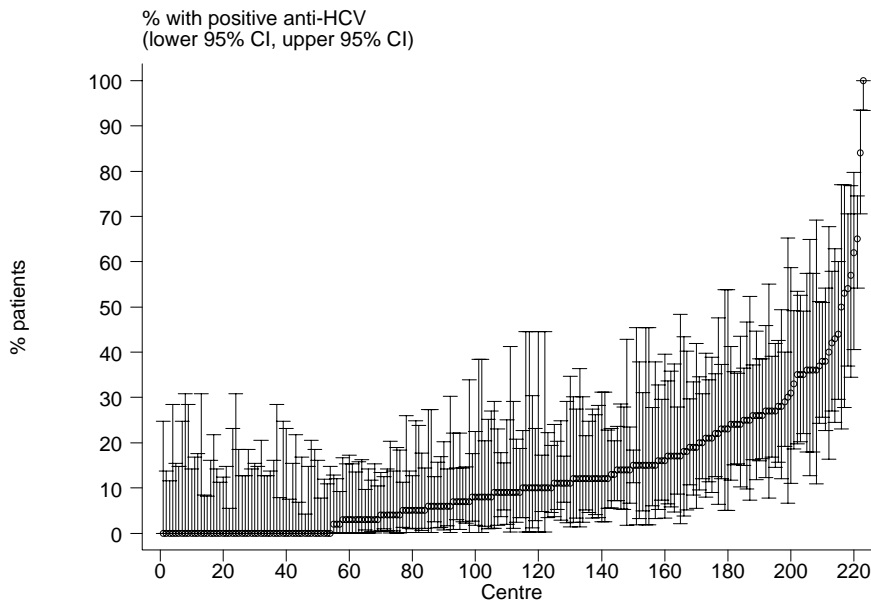


Between 1997 and 2005, the median proportion of HCV infected HD patients has decreased from 21% in 1997 to 9% in 2005. This was probably due to a greater awareness of the importance of stringent infection control measures to curb the nosocomial spread of HCV in the dialysis facility.

**Table 10.5:** Variation in Proportion of patients with positive anti-HCV at annual survey among HD centres, 2005

Year	No. of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
1997	46	0	0	13	21	29	56	64
1998	51	0	0	9	20	30	61	79
1999	76	0	0	6.5	18.5	30	58	81
2000	110	0	0	8	19	30	70	94
2001	125	0	0	7	18	30	64	92
2002	153	0	0	5	14	24	53	100
2003	173	0	0	5	13	24	49	98
2004	194	0	0	4	10.5	25	50	100
2005	223	0	0	2	9	19	40	100

**Figure 10.5:** Variation in Proportion of patients with positive anti-HCV among HD centres, 2005



In 2005 the proportion of HCV infected patients varied widely between HD centers. Overall, centres with high HCV prevalence (>30%) were decreasing, with 24 centres (11%) in 2005 as compared to 28 centres (15%) in 2004. This may have contributed to a further 3% drop in the prevalence of Hepatitis C infection from 17% in 2004 to 14% in 2005.

Similar to Hepatitis B infection, the prevalence of HCV infection was low in CAPD patients and there was no great variation seen among centres.

**Table 10.6:** Variation in Proportion of patients with positive anti-HCV at annual survey among CAPD centres, 2005

Year	No. of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
1997	7	0	0	0	6	7	9	9
1998	9	0	0	3	3	8	11	11
1999	10	0	0	3	4	7	14	14
2000	11	0	0	0	3	8	10	10
2001	12	0	0	0	3	4	6	6
2002	14	0	0	2	3	7	11	11
2003	18	0	0	1	3	7	9	9
2004	18	0	0	0	4	7	10	10
2005	18	0	0	3	4	8	13	13

**Figure 10.6:** Variation in Proportion of patients with positive anti-HCV among CAPD centres, 2005

