

**CHAPTER 10**

**HEPATITIS ON DIALYSIS**

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Between 1997 and 2004, the prevalence of HD and CAPD patients with hepatitis B surface antigen (HBsAg) was quite similar and unchanged over the years, with a slightly lower prevalence in CAPD patients.

The prevalence of HCV infection was much higher in HD compared to CAPD patients although this decreased after 2001 from 23% to 17% in 2004. This is probably due to better and more stringent implementation of infection control measures.

**Table 10.1:** Prevalence of positive HBsAg and positive Anti-HCV at annual survey, HD patients 1997-2004

Year	No. of subjects	Prevalence of HBsAg+ (%)	Prevalence of Anti-HCV+ (%)
1997	1695	6	23
1998	2141	6	22
1999	2996	6	23
2000	4392	6	25
2001	5194	6	23
2002	6108	5	20
2003	7003	5	19
2004	7556	5	17

**Table 10.2:** Prevalence of positive HBsAg and positive Anti-HCV at annual survey, CAPD patients 1997-2004

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	1232	3	4
2004	1262	4	5

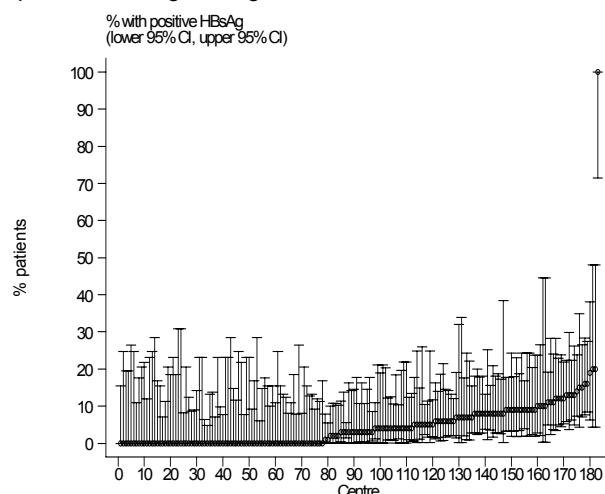
A comparison between HD centers in 2004 showed that overall proportion of positive HBsAg patients did not vary widely. About 43% (N=78) of centers have no patients with HBsAg positive. This is probably because some centers practice the policy of not accepting HBsAg positive patients.

There is however one center where all patients are HBsAg positive. This particular center is part of a large haemodialysis facility where all HBsAg positive patients are segregated.

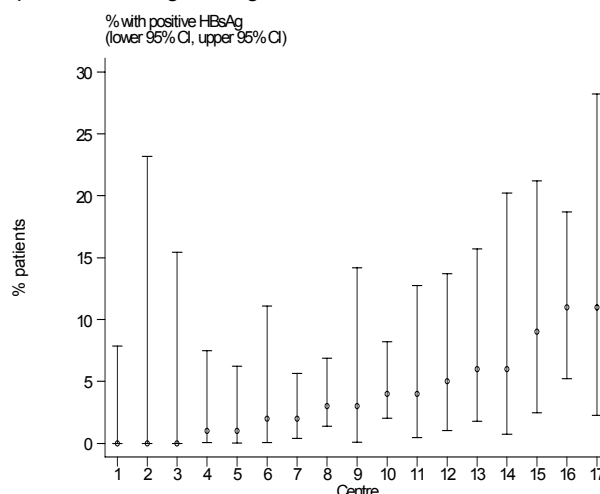
**Table 10.3:** Variation in Proportion of patients with positive HBsAg at annual survey among HD centres, 2004

Year	No. of centres	Min	5 <sup>th</sup> Centile	LQ	Median	UQ	95 <sup>th</sup> Centile	Max
1997	46	0	0	1	5	9	17	19
1998	46	0	0	1	5	8	15	16
1999	69	0	0	0	4	9	14	31
2000	100	0	0	0	4	9	15	91
2001	118	0	0	0	4	8	14	83
2002	137	0	0	0	3	7	13	15
2003	160	0	0	0	4	8	13	60
2004	183	0	0	0	3	8	13	100

**Figure 10.3:** Variation in Proportion of patients with positive HBsAg among HD centres, 2004



**Figure 10.4:** Variation in Proportion of patients with positive HBsAg among CAPD centres, 2004



**Table 10.4:** Variation in Proportion of patients with positive HBsAg at annual survey among CAPD centres, 2004

Year	No. of centres	Min	5 <sup>th</sup> Centile	LQ	Median	UQ	95 <sup>th</sup> Centile	Max
1997	7	0	0	0	2	3	8	8
1998	9	0	0	0	1	3	6	6
1999	9	0	0	0	2	2	4	4
2000	11	0	0	0	0	5	9	9
2001	12	0	0	0	2	3	8	8
2002	14	0	0	1	3	9	20	20
2003	17	0	0	2	4	6	8	8
2004	17	0	0	1	3	6	11	11

In 2004, the proportion of HBsAg positive patients did not vary widely among CAPD centers. The highest prevalence recorded was 10% in 2 centers, and this maybe due to pre existing HBsAg positivity in some patients who were previously on HD and have switched modality of dialysis to CAPD.

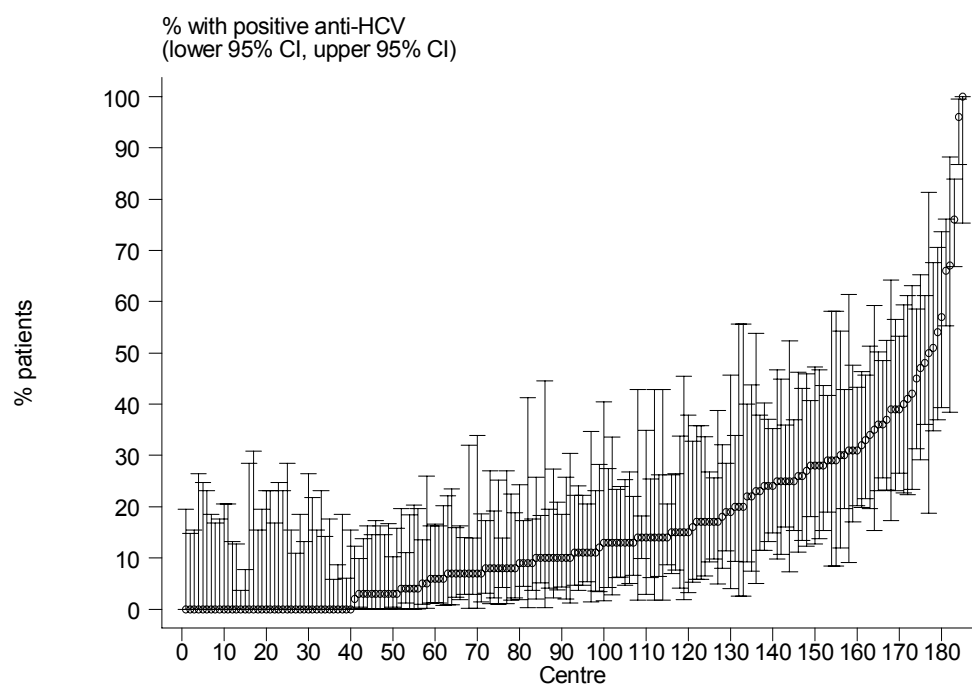
The situation with HCV infection is different. The proportion of anti-HCV positive patients varied widely between HD centers. (fig 10.5) This variability may be due to the following reasons:

- 1) Difference in infection control protocol practiced.
- 2) The cumulative risk of HCV infection increases with each year on HD; therefore older centers may have a much higher prevalence than newer centers.
- 3) High local prevalence of HCV infection (>30%) is an independent risk factor for seroconversion. Out of 185 centers, there are 28 centers (15%) with local prevalence of >30%.

**Table 10.5:** Variation in Proportion of patients with positive anti-HCV at annual survey among HD centres, 2004

Year	No. of centres	Min	5 <sup>th</sup> Centile	LQ	Median	UQ	95 <sup>th</sup> Centile	Max
1997	46	0	0	15	21	29	56	64
1998	46	0	0	11	19.5	31	59	100
1999	69	0	0	7	18	31	57	100
2000	100	0	0	7	17	31	74.5	94
2001	118	0	0	6	15	27	67	93
2002	137	0	0	5	13	25	55	100
2003	160	0	0	5	11	23.5	51.5	96
2004	185	0	0	3	11	24	48	100

**Figure 10.5:** Variation in Proportion of patients with positive anti-HCV among HD centres, 2004



In 2004, the median proportion of HCV infected patients were however quite similar to that of HBsAg positive patients among the CAPD centres, and did not vary widely.

**Table 10.6:** Variation in Proportion of patients with positive anti-HCV at annual survey among CAPD centres, 2004

Year	No. of centres	Min	5 <sup>th</sup> Centile	LQ	Median	UQ	95 <sup>th</sup> Centile	Max
1997	7	0	0	0	6	7	9	9
1998	9	0	0	0	2	4	12	12
1999	9	0	0	2	4	7	14	14
2000	11	0	0	0	3	8	10	10
2001	12	0	0	0	3	4	9	9
2002	14	0	0	2	3	8	20	20
2003	17	0	0	1	3	6	9	9
2004	17	0	0	4	5	7	10	10

**Figure 10.6:** Variation in Proportion of patients with positive anti-HCV among CAPD centres, 2004

