

CHAPTER 10

Hepatitis on Dialysis

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SECTION A: PREVALENCE

Our current dialysis population has low prevalence of Hepatitis B and Hepatitis C infection and the prevalence rate is similar between HD and PD patients, being 3 % for Hepatitis B and 2% for Hepatitis C in HD and 2% for both Hepatitis B and Hepatitis C in PD.

The prevalence of Hepatitis B was similar between HD and PD patients and had remained fairly stable for the past 10 years. The prevalence of Hepatitis C among HD patients was higher compared to PD patients in the earlier years but this has gradually reduced over the years and is now similar to that of PD patients. This reflects that there was increased awareness regarding Hepatitis C seroconversion in the hemodialysis unit, and effective infection control measures were in place to minimize nosocomial transmission of Hepatitis C in the hemodialysis unit.

Table 10.1: Prevalence of positive HBsAg and positive Anti-HCV at annual survey, HD patients 2007-2016

Year	Number of patients	Prevalence of HBsAg ⁺ (%)	Prevalence of Anti-HCV ⁺ (%)
2007	12495	5	11
2008	14954	4	9
2009	17361	4	8
2010	18893	4	7
2011	21659	4	6
2012	24890	4	5
2013	28114	4	4
2014	31696	3	4
2015	66621	2	3
2016	102447	3	2

Table 10.2: Prevalence of positive HBsAg and positive Anti-HCV at annual survey, PD patients 2007-2016

Year	Number of patients	Prevalence of HBsAg ⁺ (%)	Prevalence of Anti-HCV ⁺ (%)
2007	1731	5	4
2008	2017	4	3
2009	2144	4	3
2010	2280	3	3
2011	2461	3	3
2012	2794	3	2
2013	3160	3	2
2014	3599	2	2
2015	4237	2	2
2016	8288	2	2

SECTION B: CENTER VARIATION

There is a wide centre to centre variation in the prevalence of Hepatitis B and Hepatitis C among HD centres, and more than 50% of the centres do not have any Hepatitis B or C patients. This is largely due to many centres practicing the policy of not accepting Hepatitis B or C patients, resulting in the segregation of these patients into a few larger and older centres.

The prevalence of Hepatitis B and Hepatitis C were fairly similar among the PD centres.

Table 10.3: Variation in Proportion of patients with positive HBsAg at annual survey among HD centres, 2007-2016

Year	Number of centers	Min	5 th centile	LQ	Median	UQ	95 th centile	Max
2007	309	0	0	0	0	7	14	94
2008	358	0	0	0	0	5	13	79
2009	399	0	0	0	0	4	12	96
2010	437	0	0	0	0	5	12	96
2011	493	0	0	0	0	4	13	93
2012	551	0	0	0	0	4	12	100
2013	609	0	0	0	0	4	12	100
2014	641	0	0	0	0	3	11	100
2015	669	0	0	0	0	4	16	96
2016	697	0	0	0	0	4	19	100

Figure 10.3: Variation in proportion of patients with positive HBsAg among HD centres, 2016

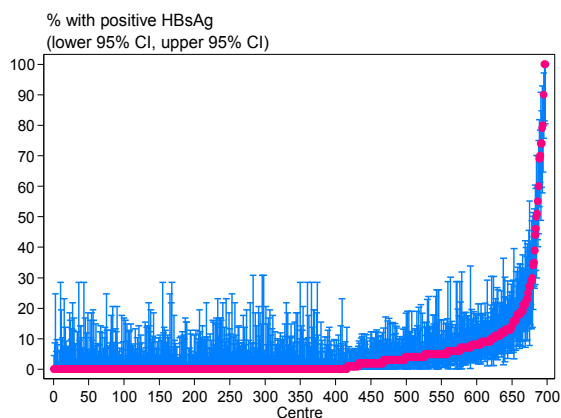


Figure 10.4: Variation in proportion of patients with positive HBsAg among PD centres, 2016

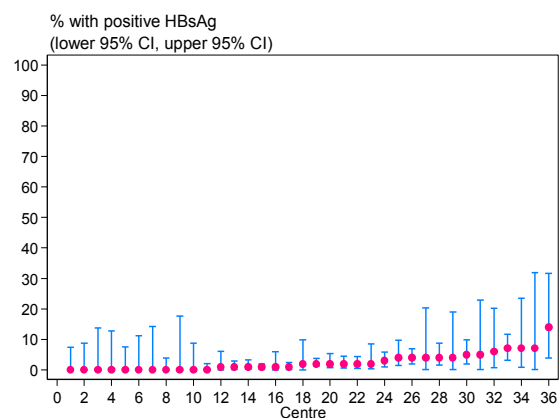


Table 10.4: Variation in proportion of patients with positive HBsAg at annual survey among PD centres, 2007-2016

Year	Number of centers	Min	5 th centile	LQ	Median	UQ	95 th centile	Max
2007	24	0	0	0	3.5	5.5	8	11
2008	23	0	0	1	3	5	8	11
2009	23	0	0	1	3	5	10	10
2010	25	0	0	1	3	3	5	7
2011	26	0	0	0	2	4	5	10
2012	28	0	0	0	2	3	5	5
2013	28	0	0	1	3	4	6	7
2014	32	0	0	0	1	2.5	5	7
2015	35	0	0	0	2	3	6	10
2016	36	0	0	0	2	4	7	14

Table 10.5: Variation in proportion of patients with positive anti-HCV at annual survey among HD centres, 2007-2016

Year	Number of centers	Min	5 th centile	LQ	Median	UQ	95 th centile	Max
2007	307	0	0	0	7	14	35	98
2008	359	0	0	0	4	12	30	100
2009	399	0	0	0	3	10	27	95
2010	438	0	0	0	2	9	25	100
2011	492	0	0	0	0	8	20	98
2012	550	0	0	0	0	7	19	100
2013	609	0	0	0	0	5	17	100
2014	642	0	0	0	0	5	14	61
2015	666	0	0	0	0	5	20	96
2016	697	0	0	0	0	4	19	92

Figure 10.5: Variation in proportion of patients with positive anti-HCV among HD centres, 2016

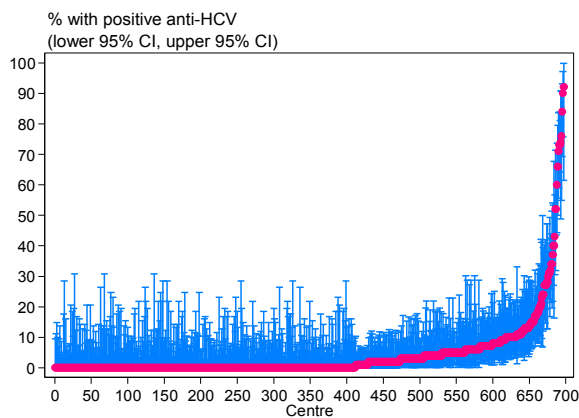


Figure 10.6: Variation in proportion of patients with positive anti-HCV among PD centres, 2016

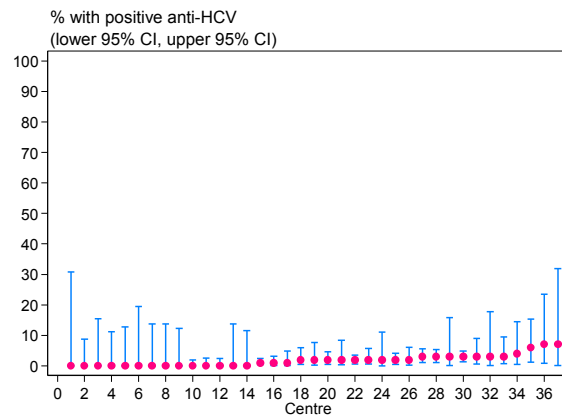


Table 10.6: Variation in proportion of patients with positive anti-HCV at annual survey among PD centres, 2007-2016

Year	Number of centers	Min	5 th centile	LQ	Median	UQ	95 th centile	Max
2007	24	0	0	1	3	6	9	13
2008	23	0	0	0	3	4	5	9
2009	23	0	0	0	2	4	5	7
2010	25	0	0	0	2	3	5	6
2011	26	0	0	0	2	3	6	9
2012	28	0	0	0	1	3	4	10
2013	28	0	0	0	1.5	3	6	9
2014	32	0	0	0	1	3	6	6
2015	35	0	0	0	1	2	8	10
2016	37	0	0	0	2	3	7	7

CONCLUSION

The prevalence of Hepatitis B and Hepatitis C among our HD and PD patients has remained low for the recent years reflecting overall effective infection control measures within the dialysis unit. We need to continue to educate our staff and monitor the infection control practices within the dialysis unit to minimise the seroconversion risk for our dialysis patients.