Blood borne virus infections in renal replacement therapy patients in Scotland 2010-2011



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SRR prevalent RRT patients 2002 -2011



Prevalence of BBV infection in RRT patients in Scotland in Dec 2010

Mode of RRT	Hospital HD	Home HD	PD	Renal Transplant	Total
Hepatitis C	31	2	2	12	47
Hepatitis B	10	0	0	4	14
HIV	4	0	1	1	6
Total	45	2	3	17	67
Total population at risk	1847	49	283	2189	4368

Prevalence of BBV infection in RRT patients in Scotland in Dec 2011

Mode of RRT	Hospital HD	Home HD	PD	Renal Transplant	Total
Hepatitis C	33	2	0	13	48
Hepatitis B	8	0	1	6	15
HIV	1	0	2	3	6
Total	42	2	3	22	69

Prevalence of BBV infection in renal clinic patients in NHS GG&C Dec 2011

Clinic	Low clearance (eGFR < 30ml/min	General nephrology	Total
Hepatitis C	2	15	17
Hepatitis B	4	8	12
HIV	0	6	6
Total	6	29	35
Total population at risk	"500"	"4000"	"4500"

Attributed cause of hepatitis C infection in HD patients in Glasgow in Dec 2011

- Unknown (n=8)
- Exposure to blood products pre-1990 (n=4)
- Social risk factors (n=2)
- Hospital acquired (n=2; both now hepatitis C PCR negative)
- Holiday acquired (n=2; one now hepatitis C PCR negative)

Renal Association Clinical Practice Guideline on Prevention of Blood Borne Virus Infection in the Renal Unit

Geddes C, Lindley E, Duncan N. Nephron Clin Pract 2011;118(suppl 1): c165– c188 DOI: 10.1159/000328068



NHS Evidence Accreditation Mark



Guideline 2.2 – Dialysis equipment

We recommend that dedicated machines are <u>not</u> required for patients with HCV or HIV provided that disinfection processes are properly carried out between patients according to a local protocol that incorporates the manufacturer's instructions. (1B) (KDIGO Hepatitis C guideline 3.1)

Only 3 of 9 renal services in Scotland follow this guideline (i.e. 6 units still use dedicated machines for patients with hepatitis C)

Guideline 3.3 – BBV surveillance in dialysis patients

We recommend that patients on regular hospital haemodialysis who have responded to hepatitis B immunisation only need to be tested for HBsAg once a year. Non-responders should be tested at least every 3 months. (1C)

8 of 9 renal services follow this guideline (other unit tests every 6 months)

Guideline 3.4 – BBV surveillance in dialysis patients

We recommend that patients on regular hospital haemodialysis should be tested for HCV antibody at least every 6 months. (1C) (KDIGO Hepatitis C guideline 1.2.2)

All renal services comply with this guideline (8 perform testing for hepatitis C every 3 months)

Guideline 3.5 – BBV surveillance in dialysis patients

We recommend that antibody surveillance testing for HIV is not necessary for patients on regular hospital haemodialysis unless the patient is at high risk. (1C)

All renal services screen HD patients for HIV at least once per year (annual testing in 5 units, every 6 months in 3 units, every 3 months in 1 unit)

Guideline 3.7 – BBV surveillance in dialysis patients

We recommend that patients returning from dialysing outside the UK should have a risk assessment for potential exposure to BBV abroad. (1B)

All units either isolate the patient (n=8) or the machine (n=1) after return from travelling to countries assessed as high risk of BBV infection

Guideline 3.8 – BBV surveillance in dialysis patients

We recommend that enhanced surveillance in patients deemed to be at high risk after returning from abroad should consist of HCV RNA (or HCV core antibody) every 2 weeks for 3 months (1B)

All renal services in Scotland follow this recommendation

Guideline 4.3 – BBV Infection: Segregation of patients infected with BBV

We recommend that patients with HCV or HIV do <u>not</u> need to be dialysed in a segregated area but more experienced staff should be allocated to dialyse these patients. (1C)

4 of the 9 renal services in Scotland follow this guidance (i.e. 5 units still perform HD in hepatitis C patients in a segregated area)

Conclusions

- Relatively low incidence of BBV infection in RRT patients in Scotland
- Low risk of HAI or acquiring BBV infection on travel abroad in the past 2 years
- Renal services in Scotland exhibit a cautious approach in following guidelines on prevention of BBV infection in HD patients

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