

## Section E PERITONEAL DIALYSIS

The prospective national audit of the incidence of episodes of peritoneal dialysis (PD) related peritonitis, adequacy of dialysis and causes of PD technique failure, is reported to the SRR from all adult renal units in Scotland every 6 months. The causative organism and clinical outcome of each episode of peritonitis is recorded.

The standard definition of peritonitis used throughout the duration of the audit can be found on the SRR website: <http://www.srr.scot.nhs.uk/Projects/Projects5.html#periton>

The peritonitis rate data from 01 January 2000 to 31 December 2010 are reported here, along with dialysis adequacy and technique failure data from 2010.

The number of prevalent adult patients on PD fell during 2010 from 290 to 274 while the proportion of PD patients who received APD remained static.

<b>E1 Peritonitis rates in adult renal units 2000-2010</b>				
Renal Unit	Peritonitis rates (months between episodes)			
	Jan 2000 - Dec 2007	Jan 2008- Dec 2008	Jan 2009 - Dec 2009	Jan 2010- Dec 2010
ARI	17.7	23.0	33.3	19.3
XH	27.2	22.8	22.4	20.8
DGRI	29.8	38.6	17.1	24.8
GLAS*	-	-	-	25.2
GRI	19.7	25.9	29.0	-
MONK	28.9	13.5	26.5	17.2
NINE	23.1	31.2	40.3	18.4
QMHD	18.7	27.3	14.5	14.9
RAIG	15.3	23.9	33.2	19.6
RIE	15.6	13.0	15.2	15.5
WIG	19.6	12.7	16.1	-
<b>Scotland</b>	<b>19.9</b>	<b>18.5</b>	<b>20.3</b>	<b>18.9</b>

\*The two units in Glasgow (GRI and WIG) merged in 2010 and so data are combined for 2010.

Peritonitis rates are quoted as the number of patient treatment months between infections.

There were 176 episodes of PD related peritonitis in 2010.

The causative organisms were:	Coagulase negative Staphylococcus	55 (31%)
	Staphylococcus aureus	23 (13%)
	Gram negative bacilli	23 (13%)
	Other bacteria (e.g. Streptococci)	43 (24%)
	Fungal	5 (3%)
	Culture negative	27 (15%)

Peritonitis accounted for 35/93 (38%) of all PD technique failure during 2010.

Of the 275 patients on PD at the end of June, 18 (6.5%) had a most recent total creatinine clearance less than the UK Renal Association standard of 50L/week/1.73m<sup>2</sup>. Between 01 January 2010 and 30 June 2010 16 patients discontinued PD because of inadequate dialysis and/or poor ultrafiltration. Similarly 9% of prevalent PD patients on 31 December 2010 had a most recent total creatinine clearance <50L/week/1.73m<sup>2</sup> and 10 patients discontinued PD between 01 July 2010 and 31 December 2010 because of inadequate dialysis and/or poor ultrafiltration.

National peritonitis rates have remained unchanged over more than a decade and every year continue to meet the standard set by the UK Renal Association (less than one episode per patient per 18 months). However there is wide variation in peritonitis rates among units and we plan to review preventative strategies across the country to identify best practice within the units with the lowest incidence of peritonitis.

Peritonitis, inadequacy of dialysis and/ or poor ultrafiltration remain the most common causes of PD technique failure and were the attributed cause in 61 of the 93 PD patients switching to HD in 2010.