Surgery for congenital heart defects

Table 4 presents figures for a number of major congenital heart conditions, from 1985 to 1994. There were 1,520 operations for congenital defects in 1994, with a mortality rate of 3.4%. Compared with 1993, there was an increase in the number of operations for valve defects (38.7% increase), atrial septal defects (13.2%) and persistent ductus arteriosus (7.6%). Operations for coarctation of the aorta fell by 19.5%, Tetralogy of Fallot by 13.6%, ventricular septal defect by 3.7% and other conditions by 1.6%. The number of operations for the transposition of great vessels remained fairly steady.

Table 4: Operations for congenital conditions by major heart defect, 1985–94

Congenital heart defect	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
					(Number)					
Persistent ductus arteriosus	165	162	196	195	288	164	165	127	131	141
Valve defects	110	68	66	67	51	72	81	60	62	86
Coarctation of aorta	135	142	162	99	126	103	109	102	128	103
Atrial septal defect	179	201	209	266	232	245	249	265	228	258
Ventricular septal defect	213	209	257	234	218	231	252	254	270	260
Tetralogy of Fallot	141	116	169	156	140	116	144	169	154	133
Transposition of great vessels	113	91	104	123	98	108	108	93	107	108
Other conditions	320	367	386	385	472	455	496	549	438	431
Total	**1,376**	**1,356**	**1,549**	**1,525**	**1,565**	**1,494**	**1,604**	**1,619**	**1,518**	**1,520**

Figure 3 shows the proportion of total operations for congenital heart defects accounted for by a number of major conditions, in 1982–84 compared with 1992–94. Ventricular septal defect and atrial septal defect are the primary reasons for congenital heart surgery. In 1982–84 operations for persistent ductus arteriosus and coarctation of the aorta were more common than in 1992–94. The higher proportion in the group 'all other conditions' illustrates the increase in the scope and range of operations performed over the past decade. Table 5 gives detailed figures on closed and open operations, and associated deaths, for congenital heart conditions.

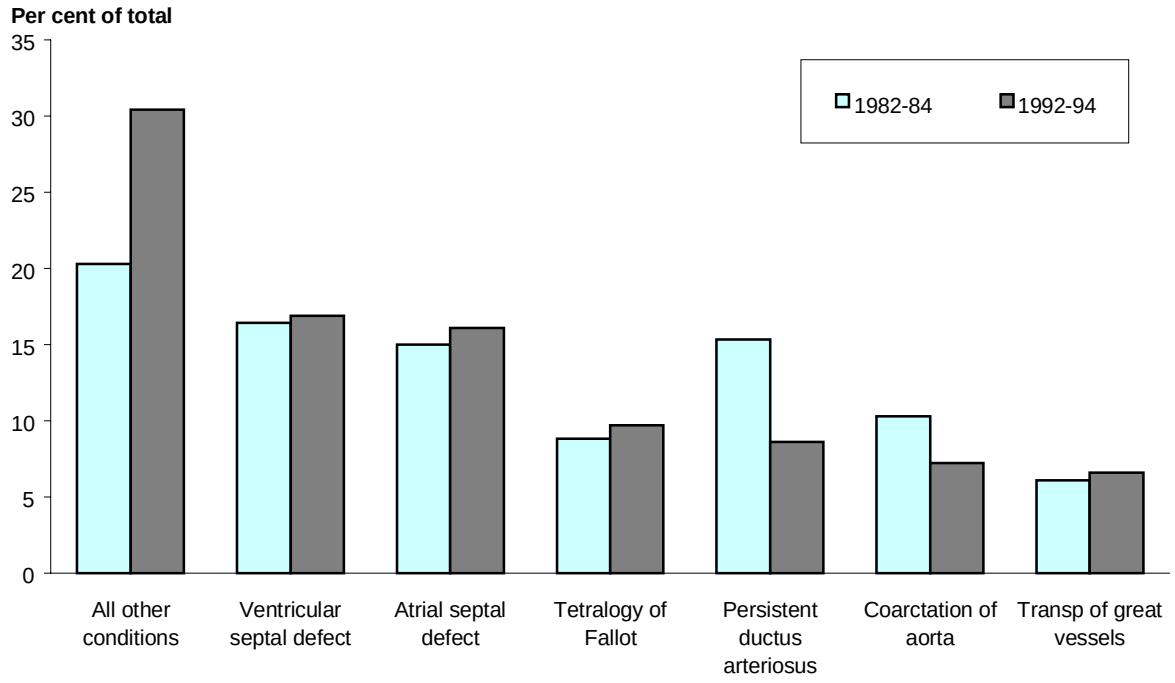

Figure 3: Operations for congenital conditions by defect as proportions of total, 1982–84 vs 1992–94

Table 5: Closed and open heart operations for congenital defects, by age group, 1994

Heart operation			Closed operations				Open operations				Overall total
			≤1 mths	1–6 mths	≥6 mths	*Total*	≤1 mths	1–6 mths	≥6 mths	*Total*	
							No. (deaths)				
Persistent ductus arteriosus			39 (0)	32 (0)	69 (0)	*140 (0)*	—	—	1 (0)	*1 (0)*	**141 (0)**
Valve defect			2 (0)	—	—	*2 (0)*	8 (1)	5 (0)	71 (2)	*84 (3)*	**86 (3)**
Coarctation of aorta			39 (1)	17 (0)	39 (0)	*95 (1)*	4 (0)	—	4 (0)	*8 (0)*	**103 (1)**
Atrial septal defect			—	—	1 (0)	*1 (0)*	2 (0)	4 (0)	251 (0)	*257 (0)*	**258 (0)**
Ventricular septal defect		palliative	17 (1)	17 (0)	19 (2)	*53 (3)*	1 (0)	1 (1)	6 (0)	*8 (1)*	**61 (4)**
		corrective	—	20 (1)	—	*20 (1)*	3 (0)	51 (0)	125 (0)	*179 (0)*	**199 (1)**
Tetralogy of Fallot	simple	palliative	4 (0)	13 (0)	1 (0)	*18 (0)*	1 (0)	1 (0)	25 (0)	*27 (0)*	**45 (0)**
		corrective	—	—	—	—	—	6 (0)	45 (0)	*51 (0)*	**51 (0)**
	complex	palliative	1 (0)	4 (0)	12 (0)	*17 (0)*	2 (1)	—	1 (0)	*3 (1)*	**20 (1)**
		corrective	—	—	—	—	—	1 (0)	14 (0)	*15 (0)*	**15 (0)**
	acquired pulmonary atresia	palliative	—	—	2 (0)	*2 (0)*	—	—	—	—	**2 (0)**
Transposition of great vessels			1 (0)	7 (0)	8 (0)	*16 (0)*	58 (7)	11 (3)	23 (1)	*92 (11)*	**108 (11)**
Extra cardiac lesions	A-P window		—	—	—	—	—	1 (0)	1 (0)	*2 (0)*	**2 (0)**
	interrupted aortic arch		6 (0)	3 (1)	1 (0)	*10 (1)*	7 (1)	—	—	*7 (1)*	**17 (2)**
	vascular ring		1 (0)	4 (0)	7 (0)	*12 (0)*	—	—	1 (0)	*1 (0)*	**13 (0)**
Coronary artery defects			—	—	—	—	—	1 (0)	3 (0)	*4 (0)*	**4 (0)**
Total anomalous pulmonary venous return			1 (0)	—	—	*1 (0)*	10 (1)	6 (0)	10 (0)	*26 (1)*	**27 (1)**
Right sided lesions	Ebstein's anomaly		1 (0)	—	—	*1 (0)*	1 (1)	—	1 (0)	*2 (1)*	**3 (1)**
	pulmonary atresia		6 (0)	2 (0)	3 (1)	*11 (1)*	6 (1)	—	6 (1)	*12 (2)*	**23 (3)**
	tricuspid atresia		4 (0)	9 (1)	3 (0)	*16 (1)*	—	2 (0)	19 (1)	*21 (1)*	**37 (2)**
Left sided lesions (includes cor triatrium, hyploplastic left heart syndrome, mitral atresia, sub aortic stenosis, supra valvular stenosis			1 (0)	—	—	*1 (0)*	6 (4)	3 (0)	40 (0)	*49 (4)*	**50 (4)**
Defects of partitioning (includes AV canal, double outlet RV, truncus arteriosus and other)			11 (1)	17 (1)	7 (1)	*35 (3)*	3 (1)	43(2)	70 (2)	*116 (5)*	**151 (8)**
Other			8 (0)	4 (0)	35 (7)	*47 (7)*	3 (0)	2 (0)	52 (2)	*57 (2)*	**104 (9)**
Total			**142 (3)**	**149 (4)**	**207 (11)**	***498 (18)***	**115 (18)**	**138 (6)**	**769 (9)**	***1,022 (33)***	**1,520 (51)**