Abstract 10 Figure 1 Reduction in indexed left ventricular (LV) end-diastolic volumes and mitral regurgitation 6-months after percutaneous mitral valve leaflet repair
Dashed black line represents mean values

Abstract 10 Table 1 Functional changes 6-months following percutaneous mitral valve leaflet repair

	Baseline	Follow up	p-value
6-minute walk test distance (m)	223±71	281±65	0.005
New York Heart Association functional class			0.002
I	0	6	
II	3	4	
III	8	1	
IV	0	0	

Abstract 10 Table 2 Changes in cardiac indices 6-months following percutaneous mitral valve leaflet repair

Cardiac Indices	Baseline	Follow up	p-value
LV end-diastolic volume (ml/m ²)	118±21	94±27	0.001
LV end-systolic volume (ml/m ²)	58±19	48±21	0.007
LV ejection fraction (%)	51±10	51±7.8	0.775
Left atrial volume (ml/m ²)	108±39	102±31	0.565
Mitral regurgitant volume (ml)	55±22	24±12	0.003
Mitral regurgitant fraction (%)	49±9.4	29±14	<0.001
RV end-diastolic volume (ml/m ²)	101±28	103±28	0.790
RV end-systolic volume (ml/m ²)	58±26	56±21	0.477
RV ejection fraction (%)	44±8.4	48±8.9	0.110
Right atrial area (cm ² /m ²)	17±4.5	18±4.3	0.508

Abbreviations: LV, left ventricular; RV, right ventricular.

detachment resulting in 11 patients (age 83±5 years, 9 male) completing follow up imaging. At 6-months: significant improvements occurred in New York Heart Association functional class and 6MWT distances (223±71m to 281±65m, $p=0.005$) (table 1) and significant reductions occurred in indexed left ventricular end-diastolic volumes (LVEDVi) (118±21ml/m² to 94±27ml/m², $p=0.001$), indexed left ventricular end-systolic volumes (58±19ml/m² to 48±21ml/m², $p=0.007$) and quantitated MR volume (55±22ml to 24±12ml, $p=0.003$) and MR fraction (49±9.4% to 29±14%, $p<0.001$) (table 2). There were no statistically significant changes in left ventricular ejection fraction (LVEF), right ventricular dimensions/ejection fraction or bi-atrial dimensions (table 2). All

patients demonstrated decreased LVEDVi and quantified MR (figure 1).

Conclusion Successful percutaneous mitral valve leaflet repair for primary MR results in reduction in MR, positive LV reverse remodelling, preservation of LVEF, and functional improvements. Larger CMR studies are now required to further guide optimal patient selection.

Conflict of Interest Nil

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A 5 YEAR STUDY OF INFECTIVE ENDOCARDITIS MANAGED BY A MULTIDISCIPLINARY TEAM IN A REGIONAL CARDIOTHORACIC CENTRE: TRENDS IN REFERRAL, INFECTIVE ORGANISMS AND OUTCOMES

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Introduction Infective endocarditis (IE) is associated with a protracted inpatient stay, prolonged intravenous antimicrobial therapy and significant morbidity and mortality.

Methods All patients with a diagnosis of IE at the Sussex Cardiac Centre (SCC) between 2016 and 2020 were included. Demographics, clinical characteristics, management, complications and outcomes were analysed. Logistic EuroSCORE, EuroSCORE II and Risk-E Scores were calculated for patients undergoing operative management.

Results In the 5-year period 202 patients had 209 diagnoses of IE. Seven patients had recurrent IE; 3 with the same organism but with persistent risk factors after initial treatment (Intravenous drug users [IVDU] n = 2 and colonic polyps n=1). IE cases increased yearly by approximately 4 cases per year ($p<0.01$). The increase was predominantly driven by cases from referring centres, with 41% transferred from other hospitals (n=85). Oral streptococci (n= 50), coagulase-positive staphylococci (n=43), non-oral streptococci (n=29) and enterococci (n=28) were the commonest organisms identified (figure 1). Only oral streptococci demonstrated a significant increase over time ($p<0.05$, figure 1). Men made up 78% (n=163) of cases, with a male predominance observed in all organism groupings. Surgical

Abstract 11 Figure 1

Abstract 11 Figure 2

management occurred in 46% of cases ($n=96$). Transferred patients were more likely to undergo operative management (OR 3.3, 95% CI: 1.8, 5.8). Although men were more likely to undergo surgical management than women (OR 2.0, 95% CI: 1.1, 4.2), this is explained by women being six times more likely to be IVDUs (OR 6.1 CI: 2.3, 16.3) and have right-sided IE (OR 6.2 CI: 2.2, 17.4). When including only left-sided IE, the rate of surgery was not different between males and females ($p=0.1$). There was no difference in in-hospital or 12-month mortality in patients admitted directly to SCC and those referred ($p=0.56$) and there was no mortality difference between the sexes ($p=0.20$). In-hospital mortality of surgically managed patients was predicted by the Risk-E Score and EuroSCORE II as 18 and 12 cases respectively. We observed 11 in-hospital deaths. This difference was not significant ($p=0.22$). Transferred patients had a higher mean Risk-E Score ($p<0.05$) and a higher score was associated with a shorter time between diagnosis and surgery ($p<0.05$, figure 2).

Conclusions There has been an increase in IE cases managed at the SCC over the last 5 years, with more transfers from other hospitals. This could be due to an increase in absolute IE numbers as well as better awareness of the need for early surgery and the involvement of an IE MDT. We report a previously unidentified male predominance in IE across all major

organisms and a significant increase in oral streptococci infection; both require further exploration. In this population the Risk-E Score tended to overestimate in-hospital mortality. Larger multi-centre studies are required to explore these trends in sub-grouped populations.

Conflict of Interest None

12 CLINICAL OUTCOMES UP TO 10 YEARS OF ASYMPTOMATIC INCIDENTAL AORTIC DISSECTIONS AND LARGE AORTIC ANEURYSMS DETECTED ON COMPUTER TOMOGRAPHY (CTA) PRIOR TO TRANSCATHETER AORTIC VALVE IMPLANTATION (TAVI)

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Introduction Computer Tomography Aortography (CTA) is performed routinely to aid planning of transcatheter aortic valve implantation (TAVI). Incidental findings are common, and may influence the decision to proceed with TAVI. The safety and long term outcomes of performing TAVI in patients with previously undiagnosed incidental CT findings of aortic dissections and large aortic aneurysms is currently unknown. We sought to establish the frequency of incidental aortic dissections and large aortic aneurysms prior to TAVI, and subsequent clinical outcomes of patients.

Methods This was a retrospective study of 628 sequential TAVI patients in a large, UK tertiary centre between January 2010 and September 2020. Patients were evaluated in 3 groups as per pre-TAVI CTA: incidental aortic dissections, aortic aneurysm $>4\text{cm}$ and all others (control group). End-points were procedural success, peri-procedural major bleeding and/or vascular complications and/or CVA, length of hospital stay, 30-day and 1-year mortality.

Results 2.9% of patients ($n=18$) had incidental aortic dissection, of which 66.7% ($n=12$) were male, with a mean age of 86.7 ± 4.4 . 3.8% of patients ($n=24$) had aortic aneurysms $>4\text{cm}$. 83.3% ($n=20$) of them were male and the mean age was 82.8 ± 5.4 . 5.6% ($n=1$) of the patients with incidental aortic dissection had severe left ventricular systolic dysfunction compared to 4.2% ($n=1$) of the patients in the aortic aneurysms group. Transfemoral approach was favoured in 77.8% of patients in the dissection group and 83.3% of patients in the aneurysm group versus 93.3% in the control group. A summary of procedural characteristics is summarised in table 1. Vascular access complications, stroke, bleeding and length of hospital stay were comparable between all 3 groups (table 2). Patients with dissection and large aneurysm had a lower

Abstract 12 Table 1 Baseline patient and procedural characteristics ($n=628$)

	Incidental dissection ($n=18$)	Incidental aortic aneurysm ($n=24$)	Other patients ($n=586$)
Percutaneous transfemoral access	10 (55.6)	20 (83.3)	497 (84.8)
Surgical transfemoral access	4 (22.2)	0 (0)	50 (8.5)
Transapical access	4 (22.2)	3 (12.5)	32 (5.5)
Transaortic access	0 (0)	0 (0)	6 (1)
Axillary cutdown for access	0 (0)	0 (0)	1 (0.2)
General anaesthesia	9 (50)	7 (29.2)	132 (22.5)
TOE guidance	9 (50)	7 (29.2)	128 (21.8)
Pre BAV	17 (88.5)	17 (70.8)	408 (69.6)
Valve in valve TAVI	1 (5.6)	2 (8.3)	32 (5.5)
Valve not deployed	2 (11.1)	3 (12.5)	17 (2.9)

Values are presented as mean $\pm$ standard deviation or N(%). TOE= Transoesophageal echocardiogram. BAV= Balloon aortic valvuloplasty. TAVI= Transcatheter aortic valve implantation