the dramatically increased speed of analysis, indicates that AI can be a valuable tool in cardiac diagnostics, offering a promising solution to the challenges of time-intensive, costly, and variable clinician-based assessments. This study highlights the crucial role that AI can play in advancing cardiac care, paving the way for more efficient, accurate, and accessible diagnostics in the future.

Conflict of Interest None

195 ECHOCARDIOGRAPHIC EVALUATION IN CHILDREN WITH SICKLE CELL ANEMIA

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Background Sickle cell anemia (SCA) is a hemoglobinopathy that is common worldwide. Cardiac abnormalities in sickle cell anemia are frequent and early. However, they are not well investigated among children. The aim of our study was to evaluate the cardiac function in children with sickle cell anemia compared to echocardiographic parameters in controls. Left ventricular two-dimensional strain was assessed as an early marker of systolic dysfunction.

Methods The study was directed in the echocardiographic laboratory in the military hospital of Tunis between July 2018 and December 2018. Thirty patients with SCA and fifty-eight controls matched for age and sex without SCA or heart disease, were compared. The echocardiographic measurements were indexed according to body surface. We have studied several morphological and functional parameters using echocardiography. Cardiac deformability of the left and the right ventricles was studied using two-dimensional longitudinal strain.

Results Our study population was divided into two matched groups. The first group included 30 patients (11.8 ± 2 yrs, sex ratio: 1.31) with homozygous SCA and the second group included 30 healthy controls (12.7 ± 1,2 yrs, sex ratio: 1.27). According to the findings, the first group showed significantly larger LV diameter (36.2±2.5 mm/m2 vs 29.3±1.3 mm/m2, p=0.005). We found also a left ventricular hypertrophy in patients with SCA. The left ventricular mass was of 109 ±22,05 g in patients and 69±25,6 g in controls. The first group showed lower LV ejection fraction (62%±0.5 vs 65% ±5, p=0.001). The study of systolic function of the right ventricle did not show a significant difference between the two groups. In addition, we reported an elevation of PAPS in the sickle cell group compared to controls (30.7 ± 4.2 mmHg, versus 24.2 ± 5.9 mmHg for controls, p <0.01). Otherwise, two-dimensional longitudinal strain of Left Ventricle was higher in SCA group (-21%±3.07 vs -25%±2.98; p<0.01). Furthermore, two-dimensional longitudinal strain of Right Ventricle was similar in the two groups.

Conclusion Cardiac abnormalities began early in childhood and progressively increase with age. Our study highlights several cardiac abnormalities in children with SCA, which could represent a marker of disease severity. Elevated LVGLS might indicate an early compensatory mechanism in response to upstream myocardial insults and may serve as an early marker of altered myocardial function in children with SCA.

Conflict of Interest no

196 TAVI WAITING TIMES; WHAT IS THE DRIVER? A SINGLE CENTRE EXPERIENCE

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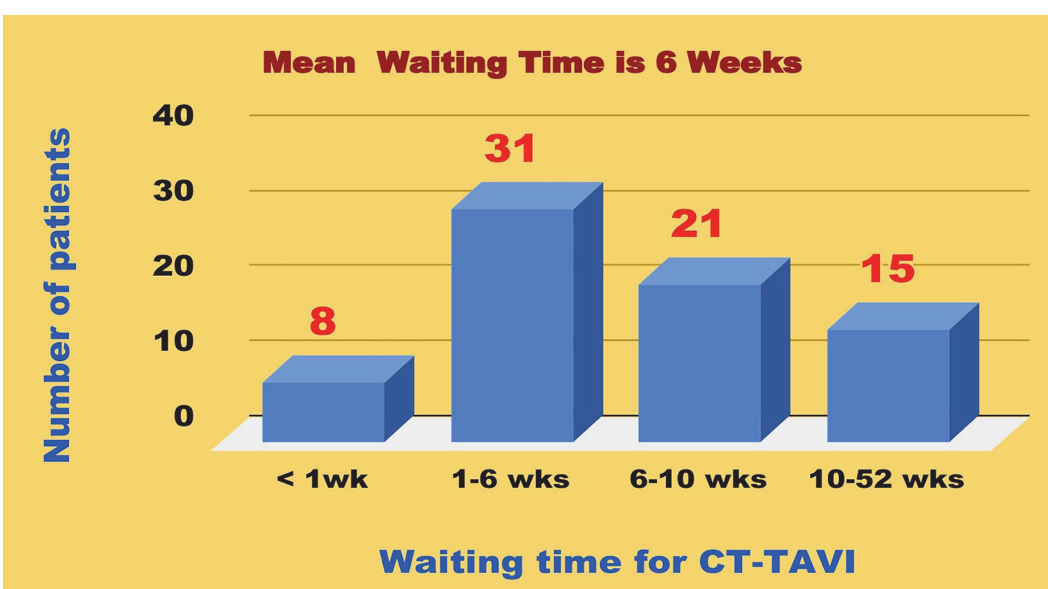
Introduction Aortic stenosis is the most common valve disease in patients aged over 65 years. The natural history of severe symptomatic aortic stenosis without treatment is poor, resulting in a 50% two-year survival and only 3% five-year survival. Trans-catheter aortic valve implantation (TAVI) is a well-established treatment for severe aortic stenosis in high-risk surgical patients. However, the waiting time for TAVI is



Abstract 196 Figure 1 CT TAVI waiting time shown in weeks

increasing. Computed Tomography for TAVI (CT TAVI) is an essential work up before TAVI.

Purpose The purpose of this study is to analyse waiting times for CT TAVI after evaluation by the heart team.

Method The study was carried out at a large district non-surgical hospital in the UK with well-established CT TAVI service. All patients who had CT TAVI scan from April 2021 to June 2023 were included.

Result A total of 75 patients (mean age 80.5±9.2 years) were identified who had CT TAVI scan. 82% of the scans were requested as outpatient and 18% were requested as inpatient. The mean time to CT TAVI from the date of request was 44 ±35 days, with only 52% of patients receiving their scan within 42 days. Notably, 20% of patients experienced wait times exceeding 70 days. Only 30 patients (40%) of those who had CT TAVI underwent TAVI procedure.

Conclusion This single centre retrospective observational study demonstrates significant delays in TAVI waiting times. CT TAVI waiting times appear to be a rate limiting factor in causing delay to TAVI treatment. Urgent action is required for a robust strategy and policy aimed at improving CT TAVI service and reducing waiting times.

Conflict of Interest None

197 UTILITY OF CLINICAL AND STRUCTURAL CARDIAC PARAMETERS IN DISCRIMINATION OF CARDIOEMBOLIC AND NON-CARDIOEMBOLIC STROKE SUBTYPES: A SYSTEMATIC REVIEW AND META-ANALYSIS

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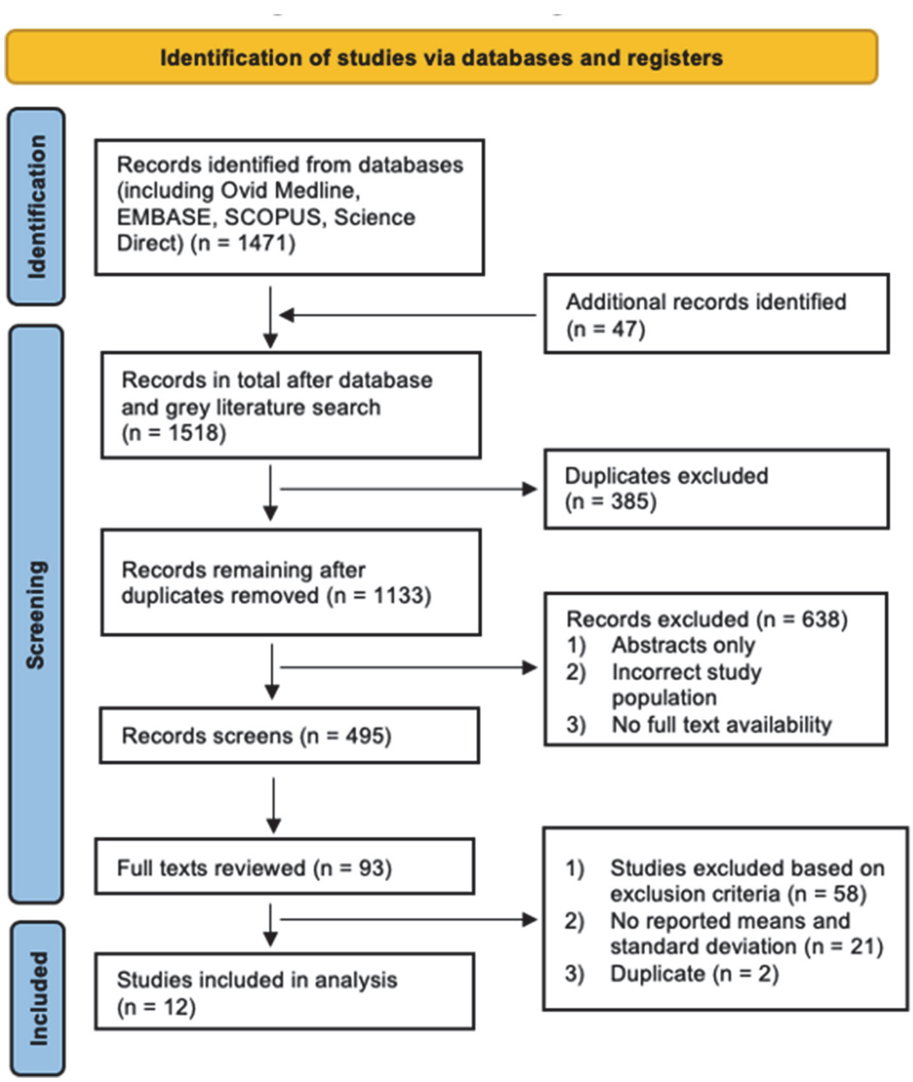
Background Discrimination between cardioembolic stroke (CES) and non-CES in undifferentiated stroke subtypes is crucial to guide treatment decisions as these conditions require differing management strategies. In this systematic review and meta-analysis, we sought to identify clinical and structural cardiac parameters associated with clear CES and non-CES subtypes in available stroke populations in the literature.

Methods We conducted a systematic review of medical databases following PRISMA guidelines, analysing relevant English studies (2000–2023) assessing adult patients with stroke (PROSPERO CRD42023454390) (figure 1). Data was extracted and meta-analysed using a random effects model, with values assessed through an odds ratio (OR) or standardised mean difference (SMD).



Abstract 197 Figure 1 PRISMA flow diagram