Introduction Iron deficiency is the most common cause of anaemia in acquired heart disease. Whilst there is abundance of literature on anaemia in such patients, it is lacking in patients with acquired congenital heart disease (ACHD) and adds to challenges in management. Over a third of patients with hypoxic congenital heart disease are iron deficient but missed due to the lack of microcytosis and hypochromia on blood tests. This is further complicated by questionable patient compliance with oral medication due to its notorious side effect profile, despite its proven benefits in patients with congenital heart disease. Insufficient identification and management can contribute to a three-fold increase in mortality. Therefore, our objectives were to assess compliance with iron tablets and any advice given to encourage continued use.

Methods Our aims were two-fold:1)Assess compliance rates in taking iron supplements and reasons behind non-compliance2)Evaluate common side effects experienced and their recall of advice given to minimise this, if any.We identified all ACHD patients seen by cardiologists as inpatient or outpatients in the year 2020, a total of 699 patients. From this, hospital and GP records suggested 53 patients with a history of iron supplementation. We formulated a questionnaire to collect qualitative data assessing the compliance of iron supplements, its side effects profile and advice received in conjunction with NICE guidelines. Reasons for exclusion were no iron supplements on prescription and death.

Results We were able to contact 69.8% of patients (n=53) successfully and 54.7% of the original sample size (n=29) confirmed being on iron therapy and consented to participate in the questionnaire. Our evaluation found a compliance rate of 86.2% (n=25). Reasons for non-compliance were the tablet size being too big, forgetting to take the tablet, polypharmacy and side effects. Whilst 51.7% of patients (n=15) reported improvement in fatigue, 55.2% of patients (n=16) reported side effects (figure 1). For the 16 patients, sided effects included constipation (56.3%, n=9), change in stool colour (43.8%, n=7), diarrhoea (6.3%, n=1) and abdominal pain (12.5%, n=2). Around 82.8% (n=24) were unable to recall receiving advice on taking iron tablets (figure 2). Of those that had received advice (n=5), 80.0% (n=4) were advised to take iron with orange juice and 20.0% advised to take it with food.

Conclusion Our compliance rates were higher in comparison to those reported in other studies, which could be explained by improvement in symptoms, awareness of chronicity and severity of their congenital heart disease and resilience of side effects. This would need to be explored further. However, it is evident a large number of patients reported side effects and lack of education to minimise this. Indeed, these results are confounded by limitations including small sample size and recall bias. Despite this, there is room for improvement in maintaining patient education in compliance of iron supplements to minimise mortality and morbidity. We propose small pocket size education cards to educate and encourage patients how to take their iron supplements, minimise side effects and improve compliance.

Conflict of Interest None

25 MANAGEMENT OF ACUTE PERICARDITIS AND MYOCARDITIS - ARE OUR PATIENTS MISSING OUT ON ESC GUIDELINE BASED PRACTICE?

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Introduction Recognising and treating myocarditis and pericarditis is often challenging and there is widespread variation in clinical practice. Delayed diagnosis and treatment can lead to poorer patient outcomes including higher pericarditis recurrence, poor symptom control and a risk of developing arrhythmias or heart failure in myocarditis.

Purpose To assess trends in the assessment and management of myocarditis and pericarditis in patients from a district general hospital.

Methods Retrospective single centre analysis was performed on patients with a coded diagnosis of 'pericarditis' and 'myocarditis' between 2019 and 2021.

Results Out of 116 patients identified, 61 were diagnosed with pericarditis with a mean age of 45.2 years (range 18–88). NSAIDs were given as monotherapy in 44.3% patients despite European society of cardiology (ESC) recommendations to include colchicine as an anti-inflammatory adjunct (class Ia recommendation) with only 16.7% of these receiving adequate dosing (Figure 1). Furthermore, if colchicine was given (40.3%), only 52% were prescribed with the correct duration. The recurrence rate was 9.8%.The remainder of patients who had myocarditis were in a younger cohort (mean age of 33.7 years, range 18–69) with a significantly elevated troponin I assayed (mean troponin of 3260.5, range 76 - >50,000). A subset of patients with atypical presentation underwent angiography initially and had a diagnosis of myocarditis given in retrospect when they had unobstructed coronary arteries. This demonstrated the diagnostic challenge associated with myocarditis. Despite clear diagnostic benefit of performing a cardiac magnetic resonance scan (CMR) (class Ic recommendation), only 78.2% of patients had this imaging modality. Only 40.8% were informed of exercise restriction requirements, which is essential to reduce the arrhythmic risk in these individuals.

Conclusion Only a minority of patients had received adequate diagnostic workup and anti-inflammatory medication for myocarditis and pericarditis. Patients who have unobstructed coronary arteries on angiogram should also be given empirical anti-inflammatory medication (aspirin included) pending further definitive CMR imaging in clinically suspected cases. Education of admitting medical teams and the development of myocarditis and pericarditis pathways should be considered to improve care of such patients.

REFERENCES

1. Ammirati, E. et al. Clinical presentation and outcome in a contemporary cohort of patients with acute myocarditis. Circulation 138, 1088–1099 (2018).
2. Adler, Y. et.al. ESC Guidelines for the diagnosis and management of pericardial diseases. *European Heart Journal*, 36(42), pp.2921–2964 (2015).

Conflict of Interest Nil.