



8th BSH Heart Failure Nurse and Healthcare Professional Study Day 2018

Presentation title: Case History – Travelling with Heart Failure

Speaker: Matthew Sunter – St George's University Hospital London

Conflicts of interest: Nil to declare

These presentation slides will be added to www.bsh.org.uk after the meeting





Patient Overview

- Julie – 56 year old
 - Anteroseptal MI 2013 with subsequent stents to Proximal and Mid LAD (Jamaica)
 - Angina May 2015 – LHC showed ISR to both stents and diseased diagonal
 - CABG x2 (Off Pump) June 2015
 - Type 2 Diabetes on Insulin
 - Colitis with sporadic diverticular disease on colonoscopy
 - Anxiety associated with illness



Clinical Status

- MPS study May 2017 - Low Ischaemic burden
- Echo March 2018 – LVEF 40%, Mild MR, Trivial TR
- No Heart failure admissions since 2016
- Stable bloods
 - Na 137, K 4.8, Ur 6.4, Creatinine 72, NT-pro BNP 104
 - Normal iron levels (Hb 120)
- Clinic Review May 2018
 - BP: 108/70mm/Hg, Pulse 72
 - Clinically Euvolaemic
 - NYHA Class II
- HF Meds
 - Ramipril 3.75mg AM, 5mg PM
 - Carvedilol 50mg BD
 - Ivabradine 5mg AM, 2.5mg PM
 - Spironolactone 12.5mg OD



Holiday plans

- Santorini Greece for 1 week
 - Travelling with friends and family
 - 4 hour flight
- Clinic review prior to departure
 - Printed Latest clinic letters, blood results, Echo report and ECG
 - Discuss need for robust travel insurance
 - Avoid medication changes unless critical
 - Consider emergency supply of loop diuretic



Choosing your destination and accommodation

- What medical facilities are available
- Is the destination at a high altitude
- What are the weather conditions
- Check with accommodation provider in advance
 - Accessibility to local amenities
 - Location of room in hotel to dining and communal areas
 - Lifts
 - Hotel facilities
 - Ability to help in case of decline in health



Flying with Heart Failure

- BCS Working group 2010 - Fitness to fly with cardiovascular disease
 - Chronic Heart Failure
 - **NYHA class I/II – no restrictions**
 - NYHA class III – May require in flight oxygen
 - NYHA class IV – Advised not to fly without in flight oxygen +/- Medical assistance
 - Acute Heart Failure
 - Fly after 6 weeks if stabilised and treated

Can we predict those who need supplemental oxygen?



Hypoxic Challenge Test

- Altitude and cabin pressure can be simulated using 15% Oxygen in nitrogen
- Patient breathes the air mixture for 20mins
 - Oxygen saturation monitoring
 - ABG's
 - Oxygen required in flight if oxygen saturations fall below 85%
- Hobkirk et al 2013
 - NYHA I/II on stable medications tolerate this with no worsening of symptoms for 1hour



Airport

- Leave plenty of time!
- Where possible pick flights at a time when you normally feel well
- Seek assistance to navigate the airport and with boarding the aircraft
- Ensure supply of medications in carry on luggage with expectation of delays
- *Pacemakers/ICD's – Patients should carry ID card and notify security staff of the implanted device*



During the flight

- Avoid alcohol and coffee
- Reduce risk of DVT
- Remain calm
 - Breathing exercises
 - Positive imagery
- Alert cabin crew early if you start to feel unwell



While away

- Don't take a holiday from managing heart failure
 - Maintain fluid restriction
 - Manage salt intake
 - Take your medications including diuretics
 - Don't ignore worsening symptoms
 - Understand how to monitor peripheral oedema
- Consider impact of time difference on medication regimes
- Pace yourself and enjoy yourself!



Returning home

- Allow time to recover and settle into a routine again
- Check weight as usual
- Contact HF team or GP for review especially if unwell whilst away or if weight has risen
- Reflect on your experience
- Plan your next holiday?



How did Julie find her holiday?

- Outbound flight – no issues encountered
- Time away – Enjoyable and relaxing
 - ‘Just what I needed to help me feel more normal’
- Return flight 😞
 - Issues with transfer to airport meant rushing
 - Flight late in day when feels more fatigued
 - Breathless on flight and felt uncomfortable throughout
- Despite this Julie plans to visit Jamaica later in the year



Other travel options

- Cruise Ships
 - Have on board medical facilities
 - Travel to multiple locations without need to move baggage around frequently
 - Lots of facilities on board
- Train Travel
 - Don't need to arrive at station as early if flying
 - Often more access to toilets for those on diuretics
 - Longer journeys can exacerbate fatigue



Souvenirs

- Ischaemic Cardiomyopathy LVEF 15%
- Significant arrhythmia burden with VT and ICD shocks
- Advised not fit to travel to daughters wedding in Cyprus

- Returned to UK after a prolonged stay due to ill health with an LVAD!







Thank you – Any questions