

Dr Susie Lewis BM BS B Med Sci DM FRCP, Dr Nick Waterfield BSc MB BS FRCP and Mrs Jude Kidd MSc



*"I am glad to have the interesting lectures and practical echo and ECG interpretation. It's best to include medical management of (in depth) cardiac pathology."*

## Report

Dr Lewis and Dr Waterfield were in Jimma for the full two weeks. Mrs Kidd was present for the first week only. We were not previously aware of the bank holiday on Friday 2<sup>nd</sup> March which shortened the course by ½ day. We included two talks on Wednesday morning which ensured that all the planned topics were covered.

We adjusted our planned timetable after discussion with Dr Tadesse to start at 8am and end at 4pm. After the first day we gave both talks in the morning usually with a coffee break between the talks. On some days there was time to go to the ward or undertake an echo before the two-hour lunch break. Only one echo machine was available so a limited amount of "hands on" echo teaching was possible for the delegates, especially because there were usually several patients, some of whom were unwell, who needed an echo. As the group of delegates numbered 11, we usually split the group with some going with Dr Waterfield to the ward for a teaching ward round and some remaining in the echo room with Dr Lewis and Mrs Kidd. The echo room was attended by a nursing sister who left at 4pm so it did not appear to be possible to continue to do echos much after 4pm or 4.30pm at the latest. Sometimes another physician was undertaking echos in the morning. During the first week while Mrs Kidd was with us she undertook most of the echos, sometimes with a delegate learning. On some occasions when possible we used one of the delegates as a model for another to practise on. More practical experience would have been possible with a second device. However we tried to teach as each echo was being performed. We also used the patient ECG and chest X rays for teaching.

During the first week the delegates were fairly quiet and reluctant to speak up during the talks. During the second week they seemed to have gained confidence and perhaps were finding our accent easier to understand and the talks became more interactive. By the second week we had learned all their names and had found out a little about each of them and where they worked. Most were based in primary hospitals, four at Jimma hospital and one at another University Hospital.

We kept an attendance record. After the first days all delegates attended every day. We also gave out feedback forms in the second week which were completed by ten delegates, results summarised below:

At the end of the course we considered that all the important topics could be covered in one week, especially if the day could be extended. More practical experience in undertaking echo would have been ideal and would have been welcomed by the delegates. Use of a second echo device would be ideal, preferably one device between two delegates. If we run this course again in another venue this would be recommended.

Score	1	2	3	4	5
Aortic valve Disease	8	1			
Acute rheumatic fever and RHD	8	1	1		
Mitral regurgitation	9				
Heart failure	7	1	1		
Cardio-myopathies	8	2			
Diastolic dysfunction	6	4			
Hypertension	8	1	1		
ECG interpretation	7	2	1		
Tachy and brady arrhythmias	7	3			
Ischaemic heart disease	8	1	1		
Diseases of the aorta	8	1			
Pericardial disease	10				
Endocarditis	8	1			
Cardiac masses	8	1	1		
HIV heart disease	6	2	1		
Practical echo sessions	5	2	2		
Dr Lewis Content	8	2			
Dr Lewis Presentation	10				
Dr Waterfield Content	9				
Dr Waterfield Presentation	8	1			

#### Comments – left by 4 delegates

*I am glad to have the interesting lectures and practical echo and ECG interpretation. It's best to include medical management of (in depth) cardiac pathology. Thanks.*

*For hypertension, it is good to present the updated documents (JNG8). Since HIV is not so common in your setup, it is better if you leave this topic or invite Dr Tadesse. Otherwise you presented it well.*

*It is better if you have more visit for such world class presentation and training and thank you very much at all!*

*I have liked the lectures and I have learned a lot from it, in the management of heart failure it was very general and high light, I wish it was more detailed. The echo sessions were also very good, except that most of us did not get the chance to practise well, that was because the time is short.*

## SCHEDULE

### **Monday 19 February**

Aortic valve disease

9am Lecture: Dr Waterfield

- Aortic stenosis
- Aetiology of aortic stenosis
- Echo assessment of severity
- Follow-up and treatment

11am Teaching ward round with delegates and Dr Tadesse

12 pm Lunch

2pm Lecture: Dr Lewis Aortic regurgitation

- Aetiology of aortic regurgitation
- Echo assessment of severity
- Follow-up and treatment

3pm Spent in the echo room with Jude undertaking echocardiograms

4pm End

### **Tuesday 20<sup>th</sup> February**

Mitral valve disease

8am Lecture: Dr Lewis Mitral stenosis

- Aetiology of mitral stenosis
- Echo assessment of severity
- Follow-up and treatment

10am Coffee

11am Lecture: Dr Waterfield Mitral regurgitation

- Aetiology of mitral regurgitation
- Echo assessment of severity and cause
- Follow-up and treatment

12 pm Lunch

2pm Teaching ward round and echos

4pm End

## Wednesday 21 February

- 8am      Lecture Dr Lewis      Cardiomyopathies:
- Hypertrophic cardiomyopathy
  - Dilated, familial and infiltrative cardiomyopathy
- 10am              Coffee
- 11am              Lecture: Dr Waterfield    ECG interpretation
- 12pm              Lunch
- 2pm              Teaching ward round and echos
- Drainage of a purulent pericardial effusion
- 4pm              End

## Thursday 22 February

- 8am:              Lecture Dr Lewis              Ischaemic heart disease
- Case presentations of stable angina, non STEMI and ST segment myocardial infarction
  - Investigation and management
- 9 am:              Practical demonstration of cardiac catheters, guiding catheters, balloons and stents
- 9.30am:              Coffee
- 10.30am              Lecture Dr Waterfield    Pericardial disease
- Pericarditis, pericardial effusions, constrictive pericarditis
- 12pm              Lunch
- 2pm              Teaching ward round and echos
- 4pm              End

## Friday 23 February

- 8am: Lecture Dr Waterfield Tachycardias
- Atrial arrhythmias, narrow and broad complex tachycardias
- 10.30 Coffee
- 11am: Lecture Dr Lewis Pulmonary hypertension
- Causes and classification of pulmonary hypertension
  - Echo findings in pulmonary hypertension
- 12pm: Lunch
- 2pm Ward round and echos
- 4pm End

## Monday 26 February

Delayed start because of power failure

- 9.15am: Lecture Dr Waterfield Bradycardias and pacing
- Sinus node disease, 1<sup>st</sup> 2<sup>nd</sup> and 3<sup>rd</sup> degree heart block
- 10.30am: Coffee
- 11am: Diseases of the aorta
- Degenerative aortic aneurysms and pseudo-aneurysms
  - Marfan's, bicuspid aortic valve and familial aortic disease
- 12pm: Lunch
- 2pm Teaching ward round and echos
- 4pm End

## Tuesday 27 February

- 8am: Lecture Dr Lewis      Heart failure
- Dilated cardiomyopathy and other causes of heart failure
  - Treatment of heart failure

- 9.30am: Dr Waterfield      Diastolic dysfunction
- Echo measurements and diagnosis
  - Treatment of heart failure due to diastolic dysfunction

10.30am: Coffee

11am Echo practise for delegates on one of them then on a patient

12pm: Lunch

1pm: Teaching ward round and echocardiography

4pm End

## Wednesday 28 February

- 8am: Lecture Dr Waterfield      Hypertension
- Grading of hypertension
  - Treatment
  - Hypertensive emergencies

9.30am: Coffee

- 10am: Lecture Dr Lewis      Cardiac masses
- Vegetations, thrombus and tumours

11am Lecture Dr Waterfield      HIV heart disease

11.30 Dr Waterfield      ECG quiz

12.30pm: Lunch

2.30pm Teaching ward round and echos

4pm End

## Thursday 1 March

8am: Lecture Dr Lewis Acute rheumatic fever

- Major and minor criteria for diagnosis
- Atypical presentation
- World Health Federation definitions of rheumatic valvular heart disease

9.30am: Coffee

10.30am: Lecture Dr Waterfield Endocarditis

- Cases of endocarditis
- Treatment and prognosis

11.30am Presentation of posters, memory sticks and certificates

- Speeches of thanks

12pm: Lunch

2pm Teaching ward round and echos

4pm 4pm Course finish

5.30pm Dinner with delegates

- Speeches of thanks
- Farewell

## Friday 2 March

Bank holiday – Adwa day – no teaching

## Notes for running the course

Timings can be changed to suit local needs: e.g. 8am start and 2 or 3 hour midday break to allow clinicians to attend to clinical duties

Didactic lectures may not always provide appropriate level teaching. It is vital to engage the audience and ensure that the level of teaching is not too basic or too advanced. This should be achieved by interactive teaching in the lectures as well as during the seminars

Ideally the attendees at the course should provide the case presentations. The lecturers should be ready to provide case presentations for discussion if this is not possible.

I envisage an audience of approximately 20 physicians and internal medicine trainees. Ideally we would provide 10 hand held echo devices for use (one between two) for the practical echo sessions. If this is not possible it may be best to use the device available in the hospital. The practical sessions can be undertaken using patients in the hospital.

A daily attendance record should be kept. A certificate can be awarded if attendees have been to 80% of the sessions. Feedback forms should be provided towards the end of the course. A memory stick with copies of the lectures should be provided with other useful resources if possible.

There is no charge for attending the course.

Trainers for the course should ideally include cardiologists and Cardiac physiologists.