BSET Fellowship Report

Manchester Royal Infirmary, October 2008 to March 2009

Leith Williams

I was delighted to have been awarded a BSET fellowship, which I believe was essential in order to complete my training. Given that we are now managing more complicated disease patterns than in the past, a combined open and endovascular approach to cases is the appropriate way forwards. Through the course of my Specialist Registrar training I had taken advantage of some opportunities to develop my endovascular skills but these were too infrequent and limited by other commitments. The ultimate aim of training should be to develop individuals who can provide appropriately planned treatment for patients with vascular disease and it was clear to me that those skills would best be learnt in a dedicated fellowship.

I was based in the Vascular Surgery and Interventional Radiology units at Manchester Royal Infirmary for 6 months. I am very grateful to all of the Consultants, trainees, nursing and radiography staff who helped to make my time there a stimulating, enjoyable and rewarding experience. In particular I would like to thank Dr Finn Farquharson and Mr Ferdinand Serracino-Inglott for setting up the fellowship and organising the opportunities for me.

My aims at the outset were to improve my understanding of endovascular approaches and their effectiveness, my knowledge of the available equipment, and my technical abilities in vascular access, angioplasty and stenting. I intended to achieve a safe level of competence generally with endovascular procedures, with particular regard to guidewire and catheter selection, limiting ionizing radiation dose, use of balloon angioplasty and stents and EVAR planning and deployment. I also wanted to ensure that I was capable of working and communicating effectively with my endovascular colleagues.

My weekly timetable had a broad structure but some inbuilt flexibility (Figure 1) to take account of the planned cases of the week as well as the work of other trainees. I took part in the daily business round on the vascular ward and after that my first duty was to the interventional suite. The fellowship was not intended to have a negative impact on other trainees but in fact there were several occasions where I was able to work alongside the other SpRs to our mutual advantage. In general, I

had an average of 6 sessions in angiography, 2 sessions in theatre and 2 sessions in CT or MR. Flexibility was the key to planning the week – it was important to be aware of which patients were due to be admitted for EVAR and what specific cases were on each interventional list. It did become clear that my opportunity to learn duplex ultrasound was limited, so I concentrated on the use of ultrasound for vascular access in the interventional suite rather than the vascular lab. I elected to be on call on a 1 in 6 basis again on a flexible basis, with some time spent with the interventional radiologist but mostly surgical. In fact, this meant I was still involved with some open operations as well as some out of hours intervention, which involved cases I would not otherwise have seen.

Figure 1. Weekly timetable

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
AM	Ward Round	Ward Round	Ward Round	Ward Round	Ward Round
	CT Angio	Vascular Lab	MR Angio	Angio NC	Angio FGF / GJM
	Angio NC	Angio NC	Angio FGF		Theatre FSI
	Theatre JVS	Vascular MDT	Theatre MGW		
PM	Angio GJM / FGF	Angio GJM	Angio GJM	Angio NC / FGF	Angio FGF / NC
	Theatre JVS		Theatre MGW		Theatre FSI

I had initial and final formal meetings with Dr Farquharson, who acted as my Educational Supervisor and we also had several informal discussions about my progress throughout the fellowship. I also had ample opportunity to discuss my training with the other Consultants during lists as well as at the weekly MDT.

My logbook experience is summarised below and in terms of interventional procedures I am pleased with the outcome. My confidence developed to a stage where I now feel competent to perform straightforward angioplasties, whether femoral, iliac or fistula. More importantly I knew the Radiology Consultants had confidence in me to work without direct supervision. However, this only occurred in the last month of the fellowship and I think an additional few months would have given me the benefit of more independence. I found uterine fibroid embolisation very useful to develop selective catheterisation skills, although outside of my specialty.

My experience with EVAR deployment was less than I had hoped for, only being involved with 16 elective cases and 4 emergencies. There were repeated problems with HDU bed availability, which meant that nearly 50% of elective cases were postponed. This had no impact on the number of cases to assess, as I was able to go back through previous CT scans, re-plan them and compare my impression with the actual outcome. I was also able to take part in planning courses for the Medtronic and Cook devices, which was helpful as both were used in the department. I am confident in the assessment and planning of stent grafts and also in the deployment of straightforward standard cases.

At the end of the 6 months, I feel I have achieved most of my aims but would like to have had more experience performing interventional procedures without direct supervision and have deployed more EVAR devices. I think this could only be achieved by extending the fellowship period to 9 or 12 months. Another solution would be to amalgamate the two endovascular units in Manchester, which would obviously increase the elective activity. There is currently a cross city on call service where each unit covers the 2.5 million population for emergencies, which obviously increases the number of acute cases admitted on take. The Consultant post I have been appointed to includes an endovascular session and this would not have been the case without my experience of the fellowship. It gives me the opportunity to develop my skills without direct supervision but with the support of my colleagues.

I would advise anyone considering a fellowship to make plans well in advance and be very clear about their aims and objectives at the start. It is essential to contact the relevant Clinical Directors in good time, to ensure the department as a whole is prepared for your role, which should be clearly defined. I would encourage them to take part in some on call, especially the interventional radiology. The Medical Staffing department cannot be contacted early enough, to make sure your occupational health, background checks, contract and salary are all in order. Lastly, it is important to realise that the fellowship funding only just covered a final year SpR basic salary, band 1A supplement and employers pension and national insurance contributions.

BSET Fellowship Logbook **October 2008 to March 2009**

	Total	Observed	Assisted	Supervised Scrubbed	Supervised Unscrubbed	Performed
Interventional procedures						
Femoral Angiogram	143	19	21	56	31	16
Angioplasty	44	9	3	25	5	2
Angioplasty & Stent	27	5	9	11	1	1
Iliac	17	1	5	8	3	
Femoral	30	8	2	16	3	1
Profunda	1			1		
Fem pop graft	9	1		7	1	
Popliteal	5		2	3		
Anterior Tibial	2			2		
Selective Subclavian	3			1	1	1
Internal Iliac Embolisation	3		1	2		
Renal	7	1	1	1	4	
Right Hepatic	1		1			
Sphenopalatine	1			1		
AV Fistulogram	49	16	11	19	2	1
Fistuloplasty	41	12	9	18	1	1
AV Fistula Embolisation	1		1			
Thrombolysis	10		5	4	1	
Angiojet	5	1	2	2		
Thrombectomy	4	1	2	1		
Tunnelled CV Line	17	3	8	6		
Uterine Fibroid Embolisation	9	2	2	5		
Chemoembolisation Liver	5	3	1	1		
Mesenteric Angiogram	3		2	1		
Carotid Angiogram	1			1		
CV Line Guidewire Removal	1	1				
PICC Line Insertion	1	1				
IVC Filter Insertion	4	2	1	1		
IVC Filter Removal	3		1	2		
Subclavian Venoplasty	1		1			
SVC Venoplasty	4	3			1	
TIPPS Venogram	1		1			
Transjugular Liver Biopsy	2	2				
Varicocele Embolisation	1	1				
Venogram	2		2			
Open procedures						
EVAR	20		8	12		
Aortouniiliac	1		1			
Fenestrated	1		1			
IBD	2		1	1		
Open AAA Repair	3		2	1		
Femoral Embolectomy	2			1		1
Brachial Embolectomy	1					1
Femoral Aneurysm Repair	2			1		1
Femoral Endarterectomy	1			1		
Popliteal Artery Repair	1			1		

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