

Curriculum Vitae

Mr Evan Davies
BM FRCS Ed (Tr. & Orth)

Present Professional Appointments

Consultant in Spinal Surgery

Southampton University Hospitals Trust

BUPA Southampton

Nuffield Bournemouth

Romsey Physiotherapy Clinic

LB Healthcare

Sarum Road Winchester

Personal Details

Name	Evan Mark Davies
Date of Birth	30.1.1966
NHS Address	Mailpoint 45, Level F Southampton General Hospital Tremona Road Shirley Southampton SO16 6YD
Private Address	BUPA Southampton Chalybeate Close Southampton
NHS Sec	02380 795173
Private Sec	02380 914466
Nationality	British
GMC Registration	3483547
Medical Defence	Medical Defence Union 253424J
Medical Degree	Southampton University 1990
CCST	1 st Feb 2003
Consultant Appointment	10 th March 2003

Scholarships

Journal of Bone and Joint Surgery Scholarship 1988
Sports Medicine, Union Memorial Hospital, Baltimore USA

Prizes

Vice Chancellors Medal/ Southampton University 1989
Awarded for outstanding contribution to University Sport

Gauvain Society

First Prize Portsmouth experience of the Souter Elbow Replacement 1999

First Prize Airline tibial compartment physiology 2001

Wessex Hand Club

Second Prize Spastic Hand Surgery 2000

Fellowships

AO Spine Fellowship Zurich, Switzerland 2000

Spinal Fellowship Nuffield Orthopaedic Centre, UK 2002

Spinal Fellowship Cleveland Clinic Ohio USA 2003

Past Appointments

House Officer	Southampton Vascular Surgery RSH Portsmouth GI/Haematology QAH
SHO	Southampton A&E Southampton Trauma and Orthopaedics Southampton Cardiothoracics Exeter General Surgery Exeter Vascular Surgery Exeter Urology Winchester Trauma and Orthopaedics
SHO3	Winchester Trauma and Orthopaedics
LAT Reg	Portsmouth Trauma and Orthopaedics
SpR Reg	Trauma and Orthopaedics Wessex Deanary Portsmouth Isle of Wight Basingstoke Poole/Bournemouth

Publications

1. J Bone Joint Surg Br. 2007 Feb;89(2):253-7.

A biomechanical comparison of kyphoplasty using a balloon bone tamp versus an expandable polymer bone tamp in a deer spine model.

Seel EH, Davies EM.

1Department of Orthopaedics, Southampton University, Hospitals NHS Trust, Southampton General Hospital, Tremona Road, Southampton SO16 6YD, UK.

We performed a biomechanical study to compare the augmentation of isolated fractured vertebral bodies using two different bone tamps. Compression fractures were created in 21 vertebral bodies harvested from red deer after determining their initial strength and stiffness, which was then assessed after standardised bipedicular vertebral augmentation using a balloon or an expandable polymer bone tamp. The median strength and stiffness of the balloon bone tamp group was 6.71 kN (sd 2.71) and 1.885 kN/mm (sd 0.340), respectively, versus 7.36 kN (sd 3.43) and 1.882 kN/mm (sd 0.868) in the polymer bone tamp group. The strength and stiffness tended to be greater in the polymer bone tamp group than in the balloon bone tamp group, but this difference was not statistically significant (strength $p > 0.8$, and stiffness $p = 0.4$).

2. Injury. 2006 Feb;37(2):138-44. Epub 2005 Oct 24

Plaster cast immobilisation during air travel-analysis of current practice and aircraft-simulated experimental study.

Senbaga N, **Davies EM**, Miller R, Glanfield M, Lambert S, O'Connor D.

Department of Orthopaedics, Southampton General Hospital, UK.

BACKGROUND: There is an increase in aircraft transportation of patients with lower limb fractures. Current practice is variable. Our aim was to study current practice and to analyse the situation in an experimental simulated aircraft flight. **METHODS:** Current advice supplied by commercial airline offices in the UK was noted. Postal questionnaires were sent to Orthopaedic Consultants in the UK to obtain their current practice. Experimental aircraft travel was simulated in a decompression chamber with five medically fit volunteers with no fracture, immobilised in an above knee plaster cast. Compartment pressure and venous return was documented and the results analysed in two different positions with the leg elevated and dependant. **RESULTS:** Airlines do not have any formal guidelines. Orthopaedic consultants in the UK note variable advise in this

situation. Experimental study in the aircraft simulation showed that two volunteers developed significant increase in compartmental pressure with the leg elevated to 90 degrees , which settled after the plaster cast was split. There was no increase in compartment pressure noted with leg dependant on the floor with 45 degrees of flexion at hip. **CONCLUSION:** The literature on this issue is limited. With our analysis we feel that patients can be transported with the plaster cast split with limb dependant on the floor i.e. hip flexion less than 45 degrees . Our volunteers had no fractures so direct comparison with pathological changes in acute fracture is problematical. Further studies into this problem are recommended.

3. Br J Clin Pharmacol. 2005 Jul;60(1):116

Inadvertent intrathecal administration of rifampicin.

Senbaga N, **Davies EM.**

4.Spine. 2005 Apr 15;30(8):964-8

Measurement of fracture kyphosis with the Oxford Cobbometer: intra- and interobserver reliabilities and comparison with other techniques.

Seel EH, Verrill CL, Mehta RL, **Davies EM.**

Spinal Unit, Department of Orthopaedics and Trauma, Southampton University Hospitals NHS Trust, United Kingdom.

STUDY DESIGN: Statistical analysis of 3 techniques for measuring thoracolumbar kyphosis secondary to fracture. **OBJECTIVES:** To determine the reliability of using an Oxford Cobbometer and assess the most reliable measurement technique. **SUMMARY OF BACKGROUND DATA:** The reproducibility of Cobb angles for the assessment of saggital plane deformity on spine radiographs has been shown to have significant variability in both intra- and interobserver

error. **METHODS:** Twenty-four lateral spine radiographs of patients with thoracic and lumbar vertebral fractures were measured on 2 separate occasions, in random order, by 4 blinded observers using the same Oxford Cobbometer and ruler. **RESULTS:** Method 2, the angle from the inferior endplate of the vertebra above the fractured vertebra to the superior endplate of the vertebra below the fractured vertebra, had the greatest intraobserver and interobserver reliabilities ($\rho = 0.856-0.976$ and $\rho = 0.95$, respectively). The other 2 methods had lower reliabilities; however, all 3 methods were well above the statistically acceptable threshold of >0.8 , and the intraobserver reliabilities with each observer was 99% overall. These reliabilities supersede results reported previously using the conventional Cobb technique. The absolute mean difference between readings and 95% limit of agreement also improves on previous data, 2 degrees and ± 5.8 degrees, respectively. **CONCLUSIONS:** Highest intraclass correlation coefficients were obtained using method 2. Using the Oxford Cobbometer to measure fracture kyphosis has higher reliability than the standard Cobb angle technique. It is easy and quick to use in a clinical setting.

5. Clin Orthop Relat Res. 2001 Jul;(388):205-8.

Type III tibial spine avulsions treated with arthroscopic Acutrak screw reattachment.

Davies EM, McLaren MI.

Department of Orthopaedics, Queen Alexandra Hospital, Portsmouth, United Kingdom.

Type III fractures of the tibial spine require open reduction and internal fixation when conservative treatment fails. The Acutrak cannulated screw system has been used successfully for arthroscopic reduction and fixation of these injuries. It was used in four children and two adults; all patients have returned to their preinjury exercise status. The use of a tent peg technique in children allows preservation of the proximal tibial physis, which prevents premature

epiphysiodesis.

6. Spine. 2005 Sep 1;30(17):1985-8.

The symptom of night pain in a back pain triage clinic.

Harding IJ, Davies E, Buchanan E, Fairbank JT.

Nuffield Orthopaedic Centre, Oxford, United Kingdom.

STUDY DESIGN: Prospective longitudinal study of patients attending a back pain triage clinic with night pain. **OBJECTIVE:** To assess the importance of the symptom of night pain in patients attending a back pain triage clinic. **SUMMARY OF BACKGROUND DATA:** The 1994 US Agency for Health Care Policy and Research guidelines suggest nighttime pain should be used as a "red flag." Night pain is known to occur in many conditions, and although common in patients with known serious pathology, the prevalence of night pain in a back pain triage clinic is not known. **METHODS:** A total of 482 consecutive patients attending a back pain triage clinic were assessed, including history of frequency and duration of night pain. Clinical examination was performed, and demographic data obtained. Magnetic resonance imaging was performed if indicated according to local guidelines. Oswestry, visual analog scales (for pain), and hospital anxiety depression scale, patient-based outcome scores were obtained. **RESULTS:** There were 213 patients who had night pain, with 90 having pain every night. No serious pathology was identified. Patients with night pain had 4.95 hours continuous sleep (range 2-7) and were woken 2.5 times/night (range 0-6). Patients with pain every night had higher Oswestry, visual analog scale, and hospital anxiety depression scale scores than those who did not. **CONCLUSIONS:** Although it is a significant and disruptive symptom for patients, these results challenge the specificity of the presence of night pain per se as a useful diagnostic indicator for serious spinal pathology in a back pain triage clinic.

7. Br J Surg. 1995 Oct;82(10):1357-8.

Aspirin improves the outcome of intra-arterial thrombolysis with tissue plasminogen activator. Thrombolysis Study Group.

Braithwaite BD, Jones L, Yusuf SW, Dawson K, Berridge DC, **Davies E**, Bowyer R, Treska V, Earnshaw JJ.

8. Ann R Coll Surg Engl. 1998 May;80(3):210-1.

The modified adjustable wrench: a new device for removal of orthopaedic hip implants.

Davies EM, O'Connor D, Clarke H.

9. J Bone Joint Surg Br. 2000 Apr;82(3):413-5.

Cryosurgery for chronic injuries of the cutaneous nerve in the upper limb. Analysis of a new open technique.

Davies E, Pounder D, Mansour S, Jeffery IT.

Queen Alexandra Hospital, Portsmouth, England.

We have treated six patients with chronic pain following nerve injury using a cryosurgical probe. All had a significant return of hand function and improvement of pain during a mean follow-up of 13.5 months. Open visualisation of the injured nervous tissue is essential for patients undergoing this technique. Four patients regained normal sensation in the dermatome of the previously injured nerve.

10. Clinical Risk 1999: 5(4): 115-119

3M Capital hip replacements; the Isle of Wight Experience

Davies EM , Evans G

11. The Association of Orthopaedic Technicians 2000 4(2):9

Lower limb dynamics during aircraft transportation

Davies EM

12. Paediatr Anaesth. 2007 Mar;17(3):289-94.

Effectiveness of Arndt endobronchial blockers in pediatric scoliosis surgery: a case series.

Bird GT, Hall M, Nel L, **Davies E**, Ross O.

Department of Anaesthetics, St Thomas' Hospital, London, UK.

BACKGROUND: Pediatric scoliosis surgery may require single lung ventilation for surgical access. Current methods of lung isolation are inadequate for some or all of these children. The Arndt endobronchial blocker (EBB) has been described for use in pediatric thoracic surgery to enable single lung ventilation (SLV). There are few data on its use in pediatric spinal deformity surgery. We report the successful use of the Arndt EBB in a series of these patients.

METHODS: Any patient undergoing surgical correction of scoliosis involving a lateral thoracotomy for an anterior approach was managed with an Arndt EBB (5, 7 and 9 Fr gauge) to facilitate SLV. All cases were undertaken by a pediatric anesthetist trained in pediatric bronchoscopy; a 2.2 or 2.8 mm pediatric fiberoptic scope was used for placement and positional confirmation. **RESULTS:** Patients' ages and weights ranged from 18 months to 18 years, and from 9.4 to 71 kg. All had idiopathic or congenital scoliosis; one underwent a vertical expansion prosthetic titanium rib (VEPTR) procedure. In all 20 patients, placement was easily and quickly achieved with no incorrect placements. There was one displacement after inflation, quickly corrected. Right upper lobe deflation proved difficult in one patient with high take-off of the right upper lobe bronchus. The surgical field was excellent in all cases. **CONCLUSIONS:** In our case series, Arndt EBB provided a safe and highly effective means of single lung isolation for children undergoing pediatric scoliosis surgery.

Teaching

SpR Programme Wessex
Medical Students University of Southampton
AO ODP Spinal Deformity Course National Chairman

Management Positions

Nil

Current Practice Scope

Spinal Deformity

Scoliosis
Kyphosis
Congenital
Tumoural/Infective

Spinal Tumours

Primary
Secondary

Spinal Trauma

High Energy
Fragility

Spinal Infection

Acquired
Tuberculosis

Cervical Spine

- Degenerative
- Radiculopathy
- Rheumatological
- Myelopathic
- OPPL
- Ank Spond

Degenerative Lumbar Spine

- Disc
- Radiculopathy
- Spinal Stenosis
- Back Pain

Thoracic Spine

- Pain
- Disc
- Fragility
- Deformity