CURRICULUM VITAE

GAVIN NIMON
M.B.,B.S., F.R.A.C.S., F.R.C.S.(Ed)

PERSONAL DETAILS

NAME Gavin Anthony NIMON

EMAIL ADDRESS gnimon9@hotmail.com

LEISURE ACTIVITIES
Tennis
Golf
Computing
Wine tasting and collecting
Photography
Guitar

CURRENT EMPLOYMENT

❑ **August 2005-** **Returning to South Australia**

Private work being undertaken in Glenelg Orthopaedics
Public work -2 sessions / week at Lyell McEwin
-1 session/ week at Queen Elizabeth Hospital

❑ **Nov 2000-** **Dumfries and Galloway Royal Infirmary**

Substantive appointment as Orthopaedic Consultant

Special Interests- Upper Limb and Hand Surgery
Sports Injuries

Management Position- Orthopaedic Representative for Emergency provision and Clinical Governance.

Private Practice
Consulting at Lochthorn Private Clinic & Barracuda Club
Surgery at - Abbey Caldew Hospital- Carlisle
- Abbey Carrick Glen Hospital- Ayr

ACADEMIC QUALIFICATIONS

POST-GRADUATE EDUCATION

- **May. 1990** — **M.B.,B.S.** degree conferred from University of Adelaide, South Australia.
- **Nov. 1991** — **F.R.A.C.S. Part I** Fellowship examination
- **Aug. 1994** — **Advanced Orthopaedic Trainee**.
  4 Year orthopaedic training program commenced.
- **May. 1998** — **F.R.A.C.S. Part II Fellowship Examination**. (Final examination)
- **Nov. 1999** — **Entry on to Specialist Register in United Kingdom**
- **April 2003** — **F.R.C.S. (Ed) - Edinburgh**

ACADEMIC APPOINTMENTS

- **Feb. 1995- 2000** — **Clinical Tutor - University of Adelaide**

Royal College of Surgeons Edinburgh Duties

- **2002-2003** — **Lecturer MRCS Course Edinburgh**
- **2002-2004** — **Lecturer Basic Surgical Skills Course, Edinburgh**
- **2004-** — **Inspector of SHO training posts**

RESEARCH - (abstracts follow in appendix)

CURRENT RESEARCH

- **Review of shoulder hemiarthroplasty using the Global prosthesis.**
  The incidence of Glenoid erosions in hemiarthroplasty for cuff arthroplasty.

- **Surgical Audit of Arthroscopic Shoulder decompression.**
  Review of 50 cases by 1 surgeon.

- **Audio-visual documentation for arthroscopic surgery**
  - A picture speaks a thousand words.

Apparent nonunion and apparent union of the scaphoid

Assessment of effectiveness of fasciectomy for Dupuytren's contracture using Biometrix E- link hand assessment system.

The role of lateral bands of the extensor expansion in persistent flexion Contracture at the PIP joint following Dupuytren's fasciectomy.

Assessment of long term outcome after closed reduction and casting of first carpo-metacarpal dislocations.

Study of patient outcome after bipolar hemiarthroplasty for hip fractures

PUBLICATIONS

- **Jan. 1998** **Journal of Paediatric Orthopaedics**
  The Natural History of Idiopathic Anterior Knee Pain: A 14 to 20 Year follow-up of Non-operative Management. Nimon G., Murray D., Sandow M., Goodfellow J.

- **May 2000** **Journal of Bone and Joint Surgery (British)**
  Long term Follow-up Of A Modified Evans Procedure- A 5 – 15 year Follow-up of 111 Patients. G. Nimon, P. Dobson, K. Angel, P. Lewis, T. Stevenson.

Research not published

- **1992** Measurements of Anti – Xa levels in patients on clexane and Fragmin prophylaxis for arthroplasty- a comparison of weight to levels demonstrates an inverse relationship and too higher levels in light weight patients.
  G. Nimon, A. Mintz, S. Barber, J. Naujalis

- **1996** Deep Vein Thrombosis Following Total Hip Arthroplasty: Early Mobilisation and Warfarin. G. Keene, G. Nimon, D. Howie, S. Graves, M. McGee, P. Sharpe and S. Zadow

PUBLICATIONS REVIEWED for editor

- **Oct. 1998** **British Journal of Sports Medicine**
  Invited to review article submitted to above journal on arthroscopic release for chondromalacia in the adolescent.

AUDIT ACTIVITIES

Local Hospital:-

All cases enterrred into prospective database at time of surgery. All complications recorded at time of occurrence and added to database. Data used for bimonthly meeting amongst 5 Consultants , Specialist Registrars and SHO's as regular meeting.

Scotland Wide:-

All cases at time of coding by hospital , coded for ISD (statistical division of Scotland) and entered on web site for review by individuals as comparison against local and national statistics

Revalidation

Every Consutant in Scotland is required to undergo a process of clinical appraisal undertaken by an independent team comprising both internal and external hospital personnel. This is being commenced as of 2002/03.

Scottish Audit of Surgical Mortality

All cases of death in a hospital (whether or not considered to be under coroner(fiscal office) are reviewed by external team to identify Causative factors . Appropiate feedback is made to consultant involved.

Scottish Arthroplasty Register

Operating for several years now, all arthroplasties involving , major joints are entered into database at statistical division, which tracks the patients CHI number (individual patient identifier) throughout any other admissions into a hospital in Scotland. Any readmissions or deaths are identified and annual data produced which notes individual and local complication rates.

TEACHING ACTIVITIES

- **MRCS Course (Edinburgh)-**
  - **May 2004**
  - **October 2003**
  - **March 2003**
  - **October 2002**
  - **July 2002**
  - **March 2002**

- **GP Lecture-**
  - **Thornhill Nov 2000- Shoulder Assesment**
  - **Newton Stewart Team-August 2002-Sports Injuries**
  - **Stranraer GP- March 2003- Shoulder & Sports**
  - **Newton Stewart January 2004- hand injuries**

- **Basic Surgical Skills**
  - **Edinburgh Dec 2004**
  - **Edinburgh May 2004**
  - **Edinburgh March 2003**
  - **Edinburgh May 2003**

- **Surgical Trainees-** **Every Thursday meeting**

- **Nurses Training** **Shoulder course 12/6/04- linvatec**

MEETINGS

REGULAR

- Weekly orthopaedic Department teaching session run by 1 of trainees in department on an issue of relevance
- Monthly ½ day session involving tutorials and practical sessions ending in management meeting for clinical department
- Bimonthly Morbidity and Mortality Meeting outlined in audit.
- Bimonthy attendance at Glasgow Shoulder meeting (chair Mark Bransby-Zacchary Southern General)

ORTHOPAEDIC MEETINGS

- **March 2004.** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.
- **Nov. 2003** British Society for Surgery of the Hand, London.
- **Jun. 2003** Scottish Orthopaedic Meeting, Stirling, United Kingdom
- **Nov. 2002** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.(FMC)
- **Feb. 2002** American Academy of Orthopaedic Surgeons , Dallas USA
- **Oct. 2002** British Orthopaedic Association-Cardisff, United Kingdom.
- **Jun. 2002** Scottish Orthopaedic Meeting, Stirling, United Kingdom
- **Jun. 2001** Scottish Orthopaedic Meeting, Stirling, United Kingdom
- **Jun. 2000** Scottish Orthopaedic Meeting, Stirling, United Kingdom
- **Nov. 1999** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.
- **July 1999** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.
- **April 1999** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.
- **Nov. 1998** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.
- **July 1998** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.
- **Feb. 1998** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.

- **July 1997** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.
- **June 1997** Australian Hip Conference-Adelaide, Australia.
- **Nov. 1996** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.
- **April 1996** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.
- **Feb 1996** American Academy of Orthopaedic Surgeons-Atlanta, America.
- **Oct. 1995** Australian Orthopaedic Association (S.A. Branch)-Clare, Australia.
- **April 1995** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.
- **Aug. 1994** Australian Orthopaedic Association (S.A. Branch)-Adelaide, Australia.
- **Sept 1994** British Orthopaedic Association-Nottingham, United Kingdom.

Orthopaedic Courses

- **April 2005** Masterclass in Elbow surgery- Glasgow
- **Sept. 2004** Reading Shoulder Course – 3 day course with Stephen Copeland
- **Feb. 2004** Linvatec Shoulder Course – visit Alex Castagna in Milano
- **Jan. 2004** Linvatec ACL Course – with Mr Don Johnson
- **Nov. 2003** Advanced Hand surgical skills- Convenor Harry Belcher
- **Feb. 2003** Linvatec ACL Course – with Mr Don Johnson
- **Oct. 2002** Visit to Cheltenham and Swansea for shoulder PIP arthroplasty techniques
  - (David Newington and Jeremy Field).
- **Feb. 2002** American Academy of Orthopaedic Surgeons
  Update Course, Dallas, America.
- **Nov 2001** Visit to Wrightington for shoulder arthroplasty techniques (Ian Trail).
- **October 2001** RCSEd Basis of Evidence in Orthopaedics (6 cme)
- **April 2001** Depuy primary and revision techniques in knee arthroplasty.
- **July 2000** Visit to Exeter for review of current Hip Arthroplasty techniques.(Graham Gie)
- **March 2000** Advanced Surgical Techniques in Hip Replacement Surgery- Glasgow
- **Jan. 1999** A.O. Advanced Hand Course – Singapore
- **June 1997** Adelaide International Hip Conference.
- **Feb 1997** Paediatric Orthopaedic Course-Sydney, Australia.
- **July 1996** Musculoskeletal Pathology course- Enneking course, Perth, Australia.
- **Feb. 1996** American Academy of Orthopaedic Surgeons
  - Update Course, Atlanta, America.
- **July 5-8. 1994** AO/ASIF Intensive Course on Fracture Treatment, London, United Kingdom.
- **June 13-17. 1994** Ethicon Microsurgery course, Edinburgh, United Kingdom.
- **April 6-9. 1994** Orthopaedic Trauma Conference, Manchester, United Kingdom.
- **July 1993** Early Management of Severe Trauma (A.T.L.S.)
  - Training course in techniques of assessment and treatment of the multi-trauma patient.

PRESENTATIONS

- **Aug. 1992** — **Australian Orthopaedic Association (S.A. Branch)**
  Fragmin (Low Molecular Weight Heparin)- What determines the dose as prophylactic agent against DVT Orthopaedic Surgery.

- **Nov. 1992** — **Queen Elizabeth Research Symposium**
  Fragmin (Low Molecular Weight Heparin)- What determines the dose as prophylactic agent against DVT Orthopaedic Surgery.

- **Aug. 1994** — **Australian Orthopaedic Association (S.A. Branch)**
  Incidence of Deep Vein Thrombosis in Total Hip Arthroplasty with Early Mobilisation.

- **Aug. 1994** — **Australian Orthopaedic Association (S.A. Branch)**
  The Natural History of Anterior Knee Pain: A 14 to 20 Year follow-up.
  (winner of Bauze Prize for best paper)

- **Sept 1994** — **British Orthopaedic Association (Nottingham)**
  Incidence of Deep Vein Thrombosis in Total Hip Arthroplasty with Early Mobilisation.

- **Sept 1994** — **British Orthopaedic Association (Nottingham)**
  The Natural History of Anterior Knee Pain: A 14 to 20 Year follow-up.

- **Oct. 1994** — **Australian Orthopaedic Association**
  Incidence of Deep Vein Thrombosis in Total Hip Arthroplasty with Early Mobilisation.

- **Feb. 1995** — **Poster - American Academy of Orthopaedic Surgeons (Orlando- Florida)**
  Incidence of Deep Vein Thrombosis in Total Hip Arthroplasty with Early Mobilisation.

- **Feb. 1996** — **American Academy of Orthopaedic Surgeons (Atlanta- Georgia)**
  The Natural History of Anterior Knee Pain: A 14 to 20 Year follow-up.

- **Feb. 1996** **Poster - American Academy of Orthopaedic Surgeons (Atlanta- Georgia)**
  The Natural History of Anterior Knee Pain: A 14 to 20 Year follow-up.

- **July 1997** **Australian Orthopaedic Association (S.A. Branch)**
  Venous Thromboembolism following Primary Total Hip Arthroplasty with Early Mobilisation and Warfarin.

- **Oct. 1997** **Australian Orthopaedic Association**
  Venous Thromboembolism following Primary Total Hip Arthroplasty with Early Mobilisation and Warfarin.

- **Sept. 1997** **Royal College of Australasian Surgeons (S.A. Branch)**
  Venous Thromboembolism following Primary Total Hip Arthroplasty with Early Mobilisation and Warfarin.

- **Oct. 1999** **Australian Orthopaedic Association (S.A. Branch)**
  A Long Term Review of the Evans Procedure for Lateral Ligament Instability of the Ankle.

- **June 2000** **Scottish Orthopaedic Meeting (annual Stirling meeting)**
  A Long Term Review of the Evans Procedure for Lateral Ligament Instability of the Ankle.

- **Feb 2002** **American Academy of Orthopaedic Surgeons (annual meeting- Dallas)**
  A Long Term Review of the Evans Procedure for Lateral Ligament Instability of the Ankle.

- **March 2004** **Australian Orthopaedic Association (local S.A. Branch meeting - Adelaide)**
  Acromioplasty..

POSITIONS HELD

❑**Jul.- Oct. 2000** **Princess Margaret Rose Orthopaedic Hospital**

Locum Orthopaedic Consultant

Excellent exposure to vast array of lower limb general orthopaedics. During this period had 2 full operating sessions/ wk with average of 5-6 arthopasties/ wk.

❑**Jan.- Jul. 2000** **Princess Margaret Rose Orthopaedic Hospital** –Mr. R. Burnett
- Mr. G. Lawson

Senior Registrar (spr level 9)

This position has excellent both in its educational value in working in a specialist arthroplasty unit dealing with complex revisions and primary arthroplasty, as well as a transition in to the U.K. system.

❑ **Jan.1999-Jan. 2000** **Senior Registrar in Orthopaedics**

North Western Adelaide Health Service Prof. R.J. Bauze

This year has been excellent in exposure to administration and registrar teaching as I have been in charge of the rostering of 6 orthopaedic registrars, a resident officer and 4 interns between 2 hospital campuses. I have also been involved in the more complex surgery in this institution and have undertaken 2 research projects.

❑ **Jan.1998-Jan.1999** **4th year Advanced Trainee in Orthopaedics**

Modbury Public Hospital Mr. R. Atkinson

Queen Elizabeth Hospital Prof. R.J. Bauze

In the final year of Advanced Orthopaedic training I successfully passed the fellowship examination, which allowed the final half of the year to be dedicated towards clinical practice.
This has allowed a lot of clinical exposure in more complicated clinical problems and has been an enjoyable way of completing the Orthopaedic training.

❑ **Feb.1997-Feb.1998** **3rd year Advanced Trainee in Orthopaedics**

Royal Adelaide Hospital- Arthroplasty unit Prof. D. W. Howie
Adelaide Women's and Children's Hospital Mr. A. Sutherland

This is the penultimate year of the Advanced training position, and has been valuable in completion of my education in preparation for F.R.A.C.S. examination.

- **Feb.1996-Feb.1997** **2nd year Advanced Trainee in Orthopaedics**

  Royal Adelaide Hospital- Trauma and Spinal unit Prof. R. Fraser
  Mr. D. Teague

  Modbury Public Hospital Mr.R. Atkinson

  A general orthopaedic year during which there was a large exposure to arthroscopic and elective orthopaedic procedures.

- **Feb.1995-Feb.1996** **1st year Advanced Trainee in Orthopaedics**

  Flinders Medical Centre Prof. Krishnan

  Royal Adelaide Hospital Mr. A. Pohl

  The first year of the Advanced training position, involved a good deal of well supervised trauma. The year was very busy and involved a varied selection of cases with increasing complexity throughout the period.

- **Feb.1994-Jan.1995** **Orthopaedic Registrar**
  (Experience in United Kingdom)

  Princess Margaret Rose Orthopaedic Hospital
  -(3 months) Rheumatoid Unit
  -(3 months) Royal Infirmary of Edinburgh Trauma Unit

  Northern District Orthopaedic Attachment
  - (2 months) Wansbeck District General Hospital
  - (4 months) Newcastle General Hospital

  The experience obtained was very valuable, averaging 50 operations / month with a level of supervision appropriate to my level of training.

- **Feb.1993-Jan 1994** **Surgical Registrar**

  Royal Adelaide Hospital

  Orthopaedic Surgery (6 months) -Professor D. Howie
  General Surgery (6 months) -Professor G. Jamieson

  This position involved all aspects of the hospital. Trauma, elective surgery and Out-patients.

- **Feb 1992-Jan. 1993** **General Surgical Year (SHO)**

  Queen Elizabeth Hospital, Adelaide

  Roster included:

Orthopaedic Surgery (6 months)	-Mr. T. Stevenson
Plastic Surgery (3 months)	-Mr. R. Watson
General Surgery (3 months)	-Mr. R. Black

  This position involved a large amount of Surgery, in which I was able to obtain more surgical experience than usual for resident positions.

- **Feb 1991-Jan. 1992** **General Surgical Year (SHO)**

  Royal Adelaide Hospital, Adelaide

  Roster included:

Urology (3 months)	-Mr. J. Jose
Accident and Emergency (6 months)	-Dr. M. Allen
Vascular Surgery (3 months)	-Professor I. Faris

  This position involved basic clerking, medical follow-up and assisting with surgical procedures. The Urology aspect involved assessing patients in casualty in a junior registrar role.

- **Jan 1990-Dec. 1991** **Intern (Houseman) Position**

  Royal Adelaide Hospital, Adelaide

  Roster included:

Orthopaedic Surgery (4 months)	-Mr. A. Von der Borch
	-Mr. D. Davidson
Neurosurgery (2 months)	-Mr. B. North
Accident and Emergency (2 months)	-Dr. M. Allen
General Medicine (2 months)	-Professor F. Bochner
General Surgery (2 months)	-Professor G. Jamieson

  This position involved basic clerking and medical care of patients.
  All the Surgical jobs involved a high level of participation in theatre.

- **Dec. 1988- Jan. 1989** **University of California in Los Angeles** - Dr. H. Amstutz

During my medical studies I undertook 2 months voluntary work experience in the department of orthopaedics.

Throughout this period I was assigned to units involved in Adult, Paediatric and Trauma orthopaedics. My duties were equivalent to that of the American junior registrars

Prizes and Awards

Orthopaedic Training

1994 **RJ Bauze prize** for best Paper presented at Main South Australian Branch of A.O.A.

Tertiary Education

1984	Behavioural Science	- Credit
	Chemistry 1M	- Distinction
	Genetics 1HM	- Distinction
	Biology 1M	- Distinction
1985	Medical Physics	- Distinction
	Biochemistry 2M	- Distinction
1986	Pharmacology 3MB	- Credit
	Biology of Disease	- Credit
	Human Physiology	- Credit
1987	Micro. & Immunology	- Credit
	Applied Physiology	- Credit
	Pharmacology 4MB	- Distinction
1988	Psychiatry 5	- Distinction
1989	Obstetrics & Gynae.	- Credit
	Medicine 6	- Credit
	Surgery 6	- Credit
	Paediatrics 6	- Credit
	Pathology	- Credit
	Community Practice	- Distinction

SECONDARY EDUCATION

James Ashton Scholarship 1978
F.I. Gray Scholarship 1979
The Senior Elder Scholarship 1981
Rex Gersch Memorial Prize 1982
Jack de Vidas Prize for Science 1982, 1983
L.J. Branson Prize-best contribution to Science Journal 1982
Photography Prize 1983

Extra Curricular Prize

The Mark Oliphant Prize - winner of senior section
in a study of "Pollution control in Adelaide"

REFEREES

Scotland

Mr. Andrew Ogden FRCS (TR and Orth)
Consultant Orthopaedic Surgeon
c/o Dumfries & Galloway Royal Infirmary
Bankend Rd,
Dumfries DG1 3AR
United Kingdom
01387 246246

Mr. Andrew Walls FRCS
Medical Director Dumfries & Galloway Royal infirmary
Consultant Surgeon
c/o Dumfries & Galloway Royal Infirmary
Bankend Rd,
Dumfries DG1 3AR
United Kingdom
01387 241338

From Australia

Mr. T Stevenson F.R.A.C.S (Orth).
c/o Orthopaedic Department
North Western Adelaide Health Service
Woodville Rd,
Adelaide,
South Australia 5011.

APPENDIX

LONG TERM FOLLOW-UP OF A MODIFIED EVANS PROCEDURE – A 5-15 YEAR FOLLOW-UP OF 111 PATIENTS

*G. Nimon, P. Dobson, K. Angel, P. Lewis, T. Stevenson.
Wakefield Orthopaedic Centre, Adelaide, Australia

Purpose of Study
To review the results of a modified Evans procedure.

Patient and Methods
One hundred and eleven patients were identified as undergoing a peroneal brevis tenodesis by one of 4 surgeons between 1983 and 1994 inclusive. All procedures were performed in patients less than 50 years of age with no pre-existing neurological or degenerative changes. Ninety four of the cases were located and invited to return to the Clinic, a follow-up rate of 85%. Of these 95 two patients were dead and one patient refused Clinic attendance, however relatives of these 3 people stated there were no problems with the ankle.

Consequently 91 cases were reviewed (82%), 25 by telephone and the rest during clinical examination of which all but the 3 underwent radiographs.

Results
Seventy of 91 had no or very mild pain and 72 of 91 had no or rare episodes of instability with or without apprehension. Considering both these aspects, a total of 59 out of 91 or 65% has no or mild pain and minimal instability with or without apprehension. These results were supported using the Karlson grading system. Clinical examination showed that 17 of the 66 examined were clinically unstable whilst 21 clinically had significant restriction of inversion. Eleven cases had early degenerative changes although only 3 had subtalar changes.

Conclusion
These results would support other literature in that a modified Evans procedure does not universally give good results, although on questioning 97.8% said they would undergo the same procedure if their other ankle was similarly affected.

VENOUS THROMBOEMBOLISM FOLLOWING PRIMARY TOTAL HIP ARTHROPLASTY WITH EARLY MOBILISATION AND WARFARIN.

Royal Adelaide Hospital and University of Adelaide, South Australia.

Authors:- G S Keene, G A Nimon, D W Howie, S E Graves, M McGee, S P Zadow.

Abstract

This prospective study compares the incidence of thromboembolism after elective primary total hip arthroplasty (THA) in patients treated by early mobilisation alone versus patients treated by early mobilisation and dose-adjusted warfarin chemoprophylaxis.

From a consecutive series of THAs the inclusion criteria were fulfilled by 86 patients for prophylaxis with early mobilisation alone and by 108 patients for prophylaxis with early mobilisation and dose-adjusted warfarin. Warfarin was started on the evening of surgery and mobilisation started the morning after surgery. Mobilisation on day one consisted of at least standing and usually walking a short distance with physiotherapy assistance. Patient demographics were similar in the two groups who were treated over a seven year period by two surgeons in the same unit with an identical posterolateral surgical approach and treatment regime.

Patients were investigated with bilateral ascending venography seven days after surgery or by duplex ultrasound in those who failed or declined venography. All patients were entered into a prospective study to determine the outcome of joint replacement, including late thrombosis. Complications relating to warfarin were confirmed with a postal questionnaire.

The incidence of deep vein thrombosis (DVT) was 30.2% (95% CL=21.0-41.2%) in patients treated by early mobilisation alone and 20.4% (CL=13.5-29.4%) in patients receiving warfarin in addition to early mobilisation (p=0.013). The incidence of proximal DVT (at or above the popliteal vein) was reduced from 14.0% (CL=7.7-23.5%) to 6.5% (CL=2.9-13.4%) [p=0.093]. The relative risk of DVT in the warfarin group versus the early mobilisation group was 0.67 (CL=0.41-1.10) [p=0.11]. There was one non-fatal pulmonary embolus in the group treated by early mobilisation alone.

The incidence of thromboembolism without chemoprophylaxis was less in the early mobilisation group than previously reported in published studies. The incidence of thrombosis was further reduced by additional dose-adjusted warfarin prophylaxis. This study supports the benefits of a policy of aggressive early mobilisation.

THE NATURAL HISTORY OF ANTERIOR KNEE PAIN - A 14 TO 20 YEAR FOLLOW-UP OF UNTREATED CASES.

Nuffield Orthopaedic Centre, Oxford United Kingdom
and Royal Adelaide Hospital, Adelaide Australia.

Authors:-Gavin Nimon , David Murray, Michael Sandow, John Goodfellow,

Abstract

We describe a consecutive series of girls who had presented with anterior knee pain in adolescence and who were treated non-operatively. At a mean follow up of 16 years, 22.4% had no pain, 71.4 % though that their symptoms were better than at presentation, 87.8% used analgesics rarely or not at all and 90% continued to participate regularly in sports. Nevertheless, about 1 in 4 of the patients continued to have significant symptoms for up to 20 years after presentation. We found no features which predicted those patients which would fall into the latter group. We conclude that surgical treatment of idiopathic anterior knee pain in adolescents is not justified until a procedure has been shown to provide a better outcome than that reported here.

INCIDENCE OF DEEP VEIN THROMBOSIS FOLLOWING EARLY MOBILIZATION AFTER TOTAL HIP REPLACEMENT

Departments of Orthopaedics and Trauma,
Royal Adelaide Hospital and University of Adelaide.

Authors:- Gavin A. Nimon, Donald W. Howie, Caroline Dale

Abstract

The incidence and distribution of deep vein thrombosis was examined in patients undergoing total hip replacement who routinely underwent early mobilization and had no chemoprophylaxis.

Ninety nine patients undergoing one hundred and one primary total hip replacements were studied. Patients with a past medical history of active malignancy, thromboembolic events or who were non-ambulant preoperatively were excluded. On the seventh postoperative day, all patients underwent either bilateral ascending venography or duplex ultrasonography in those that failed venography. Thirty two deep vein thrombi were diagnosed (32%, 95% confidence limits: 22% to 41%). Seventeen of the 32 deep vein thrombi (53%) were proximal. Fifteen deep vein thrombi (47%) occurred in the non-operated leg. Two pulmonary emboli occurred and both were associated with a distal deep vein thrombi.

The incidence of deep vein thrombi following total hip replacement without chemoprophylaxis was lower than generally quoted. This is likely to be due to early postoperative mobilization of patients.

FRAGMIN (LMWH) - WHAT DETERMINES THE DOSE AS A PROPHYLACTIC AGENT AGAINST DVT IN ORTHOPAEDIC SURGERY.

The Department of Haematology-Oncology and Orthopaedics, The Queen Elizabeth Hospital, Adelaide.

Authors:- G. Nimon, A. Mintz, S. Barber, J. Naujalis.

Abstract

The risk of DVT in joint arthroplasties is marked and well documented. For this reason, prophylaxis nowadays is considered a medico-legal necessity. Many agents have been used. Research in recent years has suggested that low molecular weight heparin (LMWH) may have advantages over conventional heparin and other therapies.

Two of these advantages put forward are a reduced level of bleeding and haematoma complications and the lack of requirement to monitor levels in the patient.

Recently an anti-factor X (activated) assay has been released. This is used as a measure of LMWH activity in the patient, and thus as a means of monitoring the dosage of LMWH administered.

We undertook a pilot study of 20 patients undergoing hip and knee arthroplasties, in order to assess the above claims. 2,500 international units of Fragmin was administered to all patients with their premedication with a further dose immediately post-operatively. Commencing the day after surgery 5,000 i.u. of Fragmin was administered daily for 7 post-operative days. On these days, venous blood was sampled 4 hours after administration, on which anti-Xa assays were performed. On the seventh post-operative day, both clinical photographs and duplex ultrasounds were performed.

In 60 % of the patients, anti-Xa levels were greater than 0.4 i.u./ml, a level considered at high risk of bleeding. The mean was 0.46 i.u./ml. Fifty five percent of patients had a subjectively greater operative haematoma than considered normal, and of these 73% had an anti-Xa level above 0.4 i.u./ml. The level of intra/postoperative blood loss was not significantly different to the previously used warfarin protocol. All duplex ultrasounds were clear on day 7, but 1 patient presented on day 21 with a DVT requiring treatment. No pulmonary emboli were identified.

In this study, significant haematoma occurred with the recommended dose, substantiated by the higher than expected anti-Xa levels. Review of the literature did not reveal research comparing 2,500 i.u./day to 5,000 i.u./day (the currently recommended dose for arthroplasty). Our research suggested the latter may be too high, and that such research should be undertaken.