

Analysis of results of surgical treatment of posttraumatic stiff elbow <i>Chandrabose Rex, PM Suresh Kumar, Addagalla Srimannarayana, S Chugh, M Ravichandran, DN Harish</i>	192
Radiological and functional outcome in extra-articular fractures of lower end radius treated conservatively with respect to its position of immobilization <i>Sunil Rajan, Saurabh Jain, A Ray, P Bhargava</i>	201
Finger avulsion injuries: A report of four cases <i>N Fejjal, R Belmir, S El Mazouz, NE Gharib, A Abbassi, AM Belmahi</i>	208
Role of gamma nail in management of petrochanteric fractures of femur <i>Vipin Sharma, Sushrut Babhulkar, Sudhir Babhulkar</i>	212
Anterior compartment pressure measurement in closed fractures of leg <i>KC Saikia, TD Bhattacharya, V Agarwala</i>	217
CASE REPORTS	
Paraplegia due to recurrent multiple hydatid cyst of the spine: A case report <i>Kshitij Chaudhary, Mihir Bapat, Siddharth Badve</i>	222
Arthroscopic removal of intraarticular fragments following fracture dislocation of the hip <i>Vaibhav Bagaria, Vikram Sapre</i>	225
Bilateral congenital absence of patella <i>J Terrence Jose Jerome, Mathew Varghese, Balu Sankaran, Simon Thomas</i>	228
LETTERS TO EDITOR	
Routine chemoprophylaxis for deep vein thrombosis in Indian patients: Is it really justified? <i>Lalit Maini, Hemant Sharma</i>	231
Authors' reply <i>Ashutosh P Mavalankar, Darshan Majmundar, Shubha Rani</i>	232
Comment on October 2008 issue 4 <i>TK Shanmugasundaram</i>	233
Editors' reply <i>Anil Kumar Jain</i>	233
OBITUARY	235,236
BOOK REVIEW	238

Routine chemoprophylaxis for deep vein thrombosis in Indian patients: Is it really justified?

Sir,

We read with interest the article "Routine chemoprophylaxis for deep vein thrombosis in Indian patients: is it really justified?". We differ with the observations made by the authors.¹

Firstly, the incidence mentioned by the authors i.e. 7.2% is significant according to us and requires more than just close monitoring.

Secondly, there are quite a few studies in the Indian literature contrary to the authors' observation. They might not be accessible on Pubmed and hence were not mentioned by the authors. We could find out quite a few studies in the Indian literature/on Indian patients with an incidence of deep vein thrombosis (DVT) higher than that reported in this study. Shead,² Nagi,³ Sharma,⁴ Rajgopalan N,⁵ Bhan,⁶ Maini⁷ reported incidences of 28%, 8%, 19.6%, 23.3%, 7.8%, 9.9% respectively. Various published studies from Agarwala⁸⁻¹⁰ showed incidences of 54%, 34.4% and 43.2% with prophylaxis and 60% without prophylaxis. Rajgopalan, Agarwala and Maini used low molecular weight heparin for prophylaxis. Shead used 125 fibrinogen uptake to determine the incidence of deep vein thrombosis. Shead, Nagi and Sharma used no prophylaxis and Bhan's is the subgroup which received no prophylaxis.

Here we would also like to draw attention to certain points in the study published which could have affected the final outcome. The average age in this study was though 60 years for males (range 25-90 years) and 62 years for females (29-94 years), but the range is very wide. Age has beyond doubt proved to be a significant factor in the development of deep vein thrombosis. The incidence of venous thromboembolism increases exponentially with age. Age is additive to other factors for thromboembolism. Age is also a risk factor independent of other risk factors.¹¹ The inclusion of young patients less than 40 years of age might also have been one of the reasons for low incidence of deep vein thrombosis in this study.

Another reason according to us is the miscellaneous surgeries (29, i.e. 23% of the total surgeries). The interlocking nail femur/tibia constituted 11 (8.8%) and other surgeries were 18 (14.4%). We are not sure how many of these were acetabular surgeries, (one patient who underwent acetabular reconstruction developed DVT) and what percentage of surgeries involved was ankle and knee trauma surgeries. Joint replacement and hip fracture surgery definitely have a higher incidence of DVT compared to other lower limb trauma surgeries.¹¹

Distal deep vein thrombosis may look benign as mentioned by the authors. The contradictory evidence from various studies has suggested that isolated calf vein thrombi may propagate rapidly and fatal pulmonary embolism from isolated calf vein DVT is a significant risk.¹⁰

Lalit Maini, Hemant Sharma¹

Department of Orthopaedics, Maulana Azad Medical College, New Delhi, ¹Department of Orthopaedics, Aruna Asaf Ali Govt. Hospital, Rajpur Road, New Delhi, India

Correspondence:

Dr. Maini Lalit 22, Samachar Apartments, Mayur Vihar, Phase I, New Delhi - 110 092, India.
E-mail: lalit_maini@rediffmail.com

REFERENCES

1. Mavalankar AP, Majmundar D, Rani S. Routine chemoprophylaxis for deep venous thrombosis in Indian patients: Is it really justified? *Indian J Orthop* 2007;41:188-93.
2. Shead GV, Narayanan R. Incidence of post operative venous thromboembolism in South India. *Br J Surg* 1980;67:813-4.
3. Nagi ON, Dhillon MS, Katariya S, Meyeeb SM. Deep vein thrombosis after major surgery-evaluation by compression ultrasonography. *Indian J Orthop* 1999;33:200-3.
4. Sharma H, Maini L, Agarwal N, Upadhyay A, Viswanath J, Dhaon BK. Incidence of deep vein thrombosis in patients with fracture around hip joint: A prospective study. *Indian J Orthop* 2002;36:157-9.
5. Rajgopalan N. Thromboprophylaxis by delteparen sodium in elective major orthopaedic surgery. A multicentric Indian study. *Indian J Orthop* 2003;37:158-61.
6. Bhan S, Dhaon BK, Gulati Y, Aggawal S. Deep venous thrombosis prophylaxis: A multicentric study. *Indian J Orthop* 2004;38:178-82.
7. Maini PS, Talwar N, Nijhawan VK, Dhawan M. Results of cemented bipolar hemiarthroplasty for fracture of femoral neck-10 year study. *Indian J Orthop* 2006;40:154-6.
8. Agarwala S, Wadhvani R, Modhe JM, Bhagwat AS. Screening of deep venous thrombosis in post operative orthopaedic patient: Comparison of color Doppler ultrasound and contrast venography. *Indian J Orthop* 2002;36:153-6.
9. Agarwala S, Bhagat A, Modhe J, Dastur FD, Patil S. Incidence of deep vein thrombosis in Indian patients: A prospective study in 104 patients. *Indian J Orthop* 2003;37:159-62.

10. Agarwala S, Bhagat AS, Wadhwani R. Pre and post operative DVT in Indian patients: Efficacy of LMWH as a prophylactic agent. *Indian J Orthop* 2005;39:55-8.
11. Parakh R, Somaya A, Todi SK, Iyenger SS. Consensus development recommendations for the role of LMWHs in prophylaxis of venous thromboembolism: An Indian prospective. *J Assoc Physicians India* 2007;55:5-30.