

Papers Presented at the Annual Meetings of the Knee Society

Editorial Comment

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The Papers Presented at the Annual Meetings of the Knee Society Symposium includes selected manuscripts read at the 2009 Members Meeting of the Knee Society held in Boston in October 2009 and the 2010 Open Scientific Meeting of the Knee Society held in New Orleans in March 2010. The Knee Society Education Committee and Program Chair, Richard Iorio, MD, assembled a broad array of scientific work for presentation at the meetings and this Symposium issue includes the best of those presented. Each paper has gone through a rigorous peer review and revision process for the authors but has resulted in a group of manuscripts that are of substantial value for readers. My sincere thanks go to the staff at CORR for their timely and valuable hard work in assisting authors through the publication process.

The 2010 Insall Award paper was authored by Dr. Douglas Dennis and colleagues from Denver who have delineated several risk factors for the development of symptomatic patellar crepitus after total knee arthroplasty. Contemporary posterior-stabilized knee designs have largely eliminated the problem of patellar clunk in which a fibrous nodule forms proximal to the patella and catches palpably and often audibly in the intercondylar box as the knee extends from a flexed position. However, patellar crepitus remains a clinical issue in a subset of patients and essentially represents a milder form of the same basic phenomena. After reviewing 60 patients with patellar crepitus and matching them to 60 patients without crepitus, the authors suggest several simple surgical strategies, including using larger patellar components whenever



Fig. 1 Mark W. Pagnano, MD, is shown.

possible, maintaining patellar composite height after patellar replacement, and avoiding increases in posterior condylar offset.

The 2010 Ranawat Award paper was authored by Dr. Thomas Fehring and gathered data from colleagues around the United States regarding the fate of patients who fail an initial attempt at irrigation, débridement, and component retention for deep prosthetic infection around a total knee arthroplasty. Much prior work has focused on the relative risks and on the rates of success/failure after irrigation, débridement, and component retention. Most contemporary authors would suggest that management strategy offers a 50% chance of success in controlling infection. Little attention has been given to the subsequent efforts to control infection in those patients who fail an attempt at débridement and component retention. Fehring and colleagues note that subgroup of patients is at much higher risk of treatment failure after two-stage

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reimplantation total knee arthroplasty than is the typical patient who undergoes the two-stage reimplantation as the first intervention for deep prosthetic infection. Before abandoning débridement and component retention for at least a subgroup of patients, however, many surgeons will want to see further work to determine the effect of selection bias on the reported high reinfection rates for those for whom débridement has failed.

The 2010 Coventry Award paper was authored by Dr. Hany Bedair and colleagues and included collaboration between Rush University and Thomas Jefferson University investigators. The authors introduce useful guidelines for the analysis of synovial fluid in ruling out infection in the early postoperative period (within 6 weeks). Prior work by numerous investigators provided data regarding synovial fluid analysis of late deep prosthetic infection and suggested synovial white blood cell counts of 1500 cells/ μL or more indicated infection particularly when accompanied by

a predominance of polymorphonuclear cells. In the early postoperative period, however, the present data show the cutoff value climbs substantially to 27,800 cells/ μL . At that level the synovial fluid white blood cell count was 84% sensitive and 99% specific in detecting deep prosthetic infection.

The remaining papers in this Symposium cover a range of topics regarding the management of the arthritic knee, including unicompartamental knee arthroplasty, techniques in primary total knee arthroplasty, results of primary total knee arthroplasty, complications, and topics in revision TKA. The high quality of these papers reaffirms the commitment of the Knee Society to advancing the international orthopaedic community's collective understanding of surgery for the arthritic knee. We hope in this issue the typical reader finds useful information that can be incorporated into daily practice as well as some intellectual puzzles that spur further inquiry.