EDITORIAL

Evolution of Australian Orthopedic Foot and Ankle Surgery

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Abstract

Foot and ankle surgery has advanced greatly in Australia since Dr Cecil Cass commenced his term as President in 1988. As a society, we have progressed to lead the discussion in many areas of advanced foot and ankle surgical practice. Fellowships and AO trauma involvement have advanced the practice, training, and research into the management of complex foot and ankle conditions.

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The orthopedic subspecialty of foot and ankle surgery has progressed significantly from an end of list basic trainee type procedure, based primarily on bunion correction. Advances in biomechanics, international collaboration, and metallurgy have enabled the subspecialty to develop rapidly based on the passion and expertise of the members and leaders within the Australian Orthopaedic Foot and Ankle Society (AOFAS). To improve and maintain the high standards expected of Australian foot and ankle surgeons, the three pioneering drivers of the society in 1988 were Ron Quirk, Brendan Dooley, and the first President of our society, Cecil Cass.[1] This was followed by the first meeting of the society in 1991 at the Royal College of Surgeons in Melbourne with Ron Quirk as a convener and Mark Myerson as an invited speaker.[2] The Australian Foot and Ankle Society has a current membership of 119 orthopedic surgeons.

AOFAS Presidents	*Australia*
C Cass	1988 to
EH BATES	1994
RP QUIRK	1995–1998
T SAXBY	1999–2003
HK Slater	2004–2007
J Negrine	2008–2010
C BROWN	2011–2013
W EDWARDS	2014–2016
A TAYLOR	2016–2019
D LUNZ	2020–current

Society meetings (Figs 1 and 2) have been held annually with invited speakers from international centers of excellence. Eminent speakers from Japan (Y Takakura), USA (C Coetzee, R Haddad, M Myerson), Switzerland (B Hintermann), France (S Barouk), and Canada (T Daniels, M Penner). A close relationship of the AOFAS with foot and ankle societies from around the world have fostered strong academic links for the discussion and training of advanced foot and ankle procedures. The industry has been involved in updating us with the latest advances in prostheses, grafting, and fixation as well as 3-D printing of metal or ceramic-based replacements. The trauma of the foot and ankle is mostly served by the subspecialty foot and ankle surgeons in Australian hospitals. Discussions have been held at meetings on the management of difficult fractures and the clinical decision-making processes required to achieve a pain-free, plantigrade, properly aligned foot and ankle that will fit in a shoe.

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The AOFAS currently runs several world-renowned accredited foot and ankle fellowships throughout the country.[3] These fellowships have trained many local and international fellows to develop advanced skills in all areas of foot and ankle surgery. Applications for these fellowships can be accessed through the Australian Orthopaedic Association website.[3] As our society and foot and ankle surgery grows, greater interest is growing amongst orthopedic trainees to make foot and ankle surgery their chosen path.

Procedures in foot and ankle surgery have become less invasive with an emphasis on maximizing outcomes, minimizing morbidity, and developing sound surgical techniques. The prostheses themselves are audited and techniques are chosen based on a safety and effectiveness assessment with the highest ethical standards.

Notable advances	
Tightrope	Syndesmosis fixation
IP implants	PIP arthrodesis
Subtalar implant[4]	Lateral column
MIS	Bunion, calcaneum
Arthroscopy	Ankle subtalar first MTPJ
TOTAL replacement	Ankle
Titanium screws	Self-tapping/drilling
Nails	Foot/hindfoot
Pain buster	Local anesthetic
3-D printing	Talus/calcaneum replacement

A registry of total ankle replacements is maintained by the AOA Joint replacement registry as part of the clinical governance process. This is supervised by Dr Andrew Beischer.[5] In Sydney and the main

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Fig. 1: AOFAS Meeting, Uluru, 2003. [R Mason (NZ), J Brodsky (USA), L Grujic, J Negrine, K Slater (AU)]

Fig. 2: Combined AUS–NZ conference 2019. *Thanks to Dr B. Cass Royal North Shore Hospital, J. Linklater Radiologist Castlereagh Imaging, and Dr D. Lunz Prince of Wales Hospital*

capitals, radiology and clinical meetings are conducted after hours to present difficult cases, collaborate with radiology colleagues (J Linklater, Sydney), and enable the use of sensitive and specific imaging for confirming clinical diagnoses. EOS™ biplanar X-ray and weight-bearing CT for hip/knee/ankle alignment, dual-energy CT for gout, and appropriately calibrated MRI are additions to the current arsenal. A large benefit is gained by younger consultants and fellows as these meetings are attended by senior foot and ankle surgeons.

The Future

- Reliable, effective, and functional arthroplasty of the ankle may become common practice. Dr A Wines[6] has maintained a large series of arthroplasty patients. Together with colleagues within the state and throughout Australia will lead to a better understanding of ankle arthroplasty and its role in the management of end-stage ankle arthritis.
- Arthroscopic fusions will increase in acceptance as a primary procedure in appropriate patients where patient morbidity with soft tissue healing is a consideration.
- Identifying the role of minimizing incisions through percutaneous techniques with the preservation of a soft tissue envelope being paramount.
- Trauma involvement with an understanding of foot and ankle biomechanics to prevent post-traumatic arthritis (AO Dr L Grujic).
- Collaborative management of Charcot arthropathy and diabetic infections by adding local surgical and chemotherapeutic interventions to corrective and unloading strategies.
- Cartilage repair and preservation.

The Foot and Ankle Society in Australia is striving to advance the research, education, and practice of foot and ankle surgery. Through an experienced faculty of senior surgeons, the energy and enthusiasm of younger fellows and strong collegiate bonds, a network of surgeons practising foot and ankle surgery at the peak of the subspecialty is promoted.

Acknowledgments

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