

PFJ Travelling Fellowship Update

<https://www.patellofemoral.org/activities/blogger/listings/admin>

As one of the proud recipients of the 2017 PFJ travelling fellowship I was honoured and humbled to embark on a journey that I hoped would be the answer to all the questions I had regarding some complex and difficult patients that I accumulated over my last few years as a Paediatric and Limb reconstruction surgeon in Brisbane, Australia. The first dilemma was to try and organize a program that satisfied our learning objectives. My interest in consolidating an approach to the adolescent patient with high grade dysplasia and associated bony malalignment, led us to Minneapolis, Baltimore, Banff, NYC and Kobe... although our budget and time constraints saw us regrettably miss out on many centres that would have been valuable learning opportunities.

Having arrived in Minneapolis sans luggage, I met Dr Mauro Nunez in our hotel and prepared for a 3 week immersion in all things PFJ with Dr Eliza Arendt and Dr Marc Tompkins. One of the most salient take home messages was to not get too caught up with exacting numerical assessment of common PFJ parameters. We observed trochleoplasty and PFJ replacement surgery along with several stabilisations. A particularly interesting case involved a proximal tibial corrective osteotomy for a patient with 30 degs of recurvatum and 10 degs of valgus done as a combined case with Dr Mark Dahl.

As soon as my luggage arrived in Minneapolis, we moved on to Baltimore where a cadaver lab with Dr Andy Cosgarea showed us his technique of AMZ and MPFL recon. Dr Miho Tanaka generously spent some time showing us the historical side of Johns Hopkins while discussing their research on defining the J sign. It was becoming apparent that the complexity of biomechanical forces exerted in the proximal trochlea do not lend themselves to a simple algorithm and that an individualized approach to assessment and management of these cases was critical.

Getting from Baltimore to Banff was not easy, a delayed flight saw us rush to obtain new tickets along with a 1am bus trip from Calgary to Banff. Needless to say my luggage flew back to Minneapolis and waited for me there. Surprisingly for September we were greeted with snow and while the Canadians seemed less than impressed, it is always a beautiful and amazingly picturesque experience for someone from Australia. Amidst organizing the IPSG meeting later this year, Dr Hiemstra had put together an impressive day of surgeries along with two PFJ clinics and a trip to Lake Louise. Her approach to management involved integration of multiple criteria that she used to generate a surgical prescription for her patients. It was good to see a broad surgical arsenal used to target correction of PFJ biomechanics at the site of deformity. We saw cases of both the Bereiter thin flap trochleoplasty (bump recession) and MPFL recon or the TTO and MPFL reconstruction, as was appropriate.

Our final stop was at HSS where Dr Green, Dr Shubin Stein, Dr Strickland and Dr Gomoll were kind enough to talk about and demonstrate some complex cases involving malalignment, pain, instability and chondral injury. The management of chondral injury in young patients is a concerning problem in my practice. De Novo chondral augmentation and OATS procedures were used for chondral restoration with correction of bony malalignment to offload the affected areas. The opportunity to observe some paediatric stabilization cases was a particular treat.

Throughout our travels, the recurring debate on what constitute appropriate indications for trochleoplasty were reiterated, with other hot topics being whether to distalise the tubercle in cases of Alta and also what anatomical position to place the Patella insertion of the MPFL. The aptly named alphabet soup of tendinous attachments has thankfully been renamed the PFC or Patellofemoral Complex, an acronym which I am happy to remember.

We cannot reiterate our thanks enough to the incredibly hospitable and talented surgeons that hosted us. Not only were they incredibly generous with their time, but their willingness to teach and express to us their perceptions of the biomechanical balancing act that underpins patellofemoral stability was a pleasure to experience. If only we had more time and a few more bottles of red wine with Dr Fulkerson, we might just have converted him to trochleoplasty.....