

Duke Elder Prize Visit: St John Eye Hospital, Jerusalem – A Reflection

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Saturday

Today is the start of my two week visit to St John Eye Hospital, East Jerusalem, Israel. Some extraordinarily lucky guessing, which led to winning the Duke Elder Undergraduate Ophthalmology Prize Exam 2015, has afforded me this most incredible opportunity to visit one of the most prestigious eye hospitals in the world, all expenses paid thanks to the extremely generous Royal College of Ophthalmologists. I am excited to witness first-hand the world class free care provided to both the citizens of the West Bank and Jerusalem. I am curious to experience the thousands of years of history and culture in Israel and the Middle East. I am anxious, since everyone who I have told about my visit has told me to be careful, vigilant, avoid travelling alone and public transport – not the most reassuring advice! My rudimentary understanding of the geopolitical situation comes from the many and varied viewpoints of Israeli and Arab friends and colleagues, and I hope to be able to study and understand it from my own point of view during my stay.

My flight is pleasant, and I am relieved to see a bald gentleman holding up a St John Eye Hospital sign as I exit Ben Gurion airport. His name is Nader, a Christian man whose son is also called Jonathan. He is my guide on the long road from Tel Aviv to Jerusalem – he points out the tall walls on either side of the road isolating it from the West Bank on either side, the hot air balloon, the watchtowers every few kilometres, and the hundreds of cameras keeping watch of us and the Palestinian territories, as the road carves through West Bank territory. We enjoy the near-supermoon looking down upon us in the dusk, almost full and almost at the perigee of its orbit. We eventually reach the hospital and Nader shows me to my room. It is small and showing its age, with a cold fluorescent tube light casting a depressing glare across the cracked scuffed walls. I eventually stumble into the main hospital, and bump into Mohammed, a senior nurse. “Food?” I cry, and Mohammed beams as he tells me I have come to the perfect place at the perfect time. “It is dinner time. Let us eat” he says. I sit to eat a dish whose name I cannot pronounce, consisting of rice, aubergines, chicken and yoghurt, with Mohammed, Ibrahim and George, all nurses working this Saturday. I am from the UK so we talk about football (I think I escaped without completely letting on that I have no interest in and know next to nothing about the sport). We talk about the political situation, the West Bank, checkpoints, Hebron, Donald Trump, China, the Chinese language, the Arabic language. I am taught how to say Bon Appetit in Arabic, but I am afraid I have already forgotten it at the time of writing. I shall make a better effort to learn some basic Arabic during the rest of my stay. Mohammed, Ibrahim and George return to work and I retire to my room, which is slightly less ghastly than when I left it, the unfamiliarity of the walls, lighting and single bed easing now. Time for bed.



St John Eye Hospital, Jerusalem

Sunday

It would be a great shame not to explore Jerusalem on a day as glorious as today. I pluck up the courage to visit the Old City – the stunning gates of Damascus, built in 1537 by Suleiman the Magnificent, greet me and I know immediately that this is no ordinary place. I am thrown into a sprawling maze of winding alleys and market traders vying for my custom – cries of ‘ni hao’ echo from every corner to which I reply ‘hello’. I travel so deep in this maze that I have lost all bearings and any hope of retracing my steps is lost – no point stopping now. Eventually the covered alleyways open to reveal the holiest place in Christendom, the Church of the Holy Sepulchre. It is a magnificent building filled with ancient rites and rituals from all branches of Christianity. I am privileged to witness the Calvary, where Jesus is thought to have been crucified, the Stone of Anointing, where he was washed by Joseph before burial, and the empty tomb within the Aedicule, where it is believed the resurrection occurred. Time stands still whilst I am immersed in this holy place, but the sun does not – it is twilight by the time I leave. The Western Wall is my next destination, which I make my way towards via some welcome signage. The holiest place in Judaism is spectacular, lit up against the night sky with the moon beaming down upon it. As I approach, the sound of Orthodox Jews chanting in synchronous prayer surrounds me. I don a Kippot out of respect. The wall was built by Herod the Great in approximately 20 BC to enclose the holy Temple Mount, upon which Solomon’s temple once stood. I am in awe.

It is dark and time to leave – I take a taxi, the driver of which charges me 50 Shekels which, even I realise, is grossly extortionate, but my meek bargaining skills are no help and I cough up reluctantly.

Dinner of Baba ghanoush, pitta bread, olives and chicken soup satisfies my weary soul before I return to my familiar room for some rest.



Damascus Gate, Entry to the Old City of Jerusalem





Church of the Holy Sepulchre



The Western Wall and Dome of the Rock, Old City of Jerusalem

Monday

Today's the day! The start of my 2 week adventure in ophthalmology at this unique establishment. At the break of dawn I finally meet Maureen, the lady whom I have inundated with inane questions such as 'do I need a white coat'. She is as lovely as I expect from her tolerant and patient email replies, and gives me my timetable – a crash course in the entirety of ophthalmology in 10 days! A tour of the hospital follows. It is a vast building with truly state of the art facilities. All members of staff, from medical direction Dr Garth, to receptionists and cleaners greet me with beaming smiles – this is a friendly place. I meet Brigadier Tom Ogilvie-Graham, CEO of the hospital, who is far less intimidating than his title suggests, although just as posh! He makes me feel welcome with a warm and sincere greeting.

I spend the day in the general clinic with Dr Salam Erlakat, an excellent teacher who takes no nonsense from her patients. A wide range of pathology from conjunctivitis to choroidal naevi to Morgagnian cataracts and end-stage painful glaucoma is brought to the clinic by a colourful array of people of different cultures – Palestinian, Jew, Eritrean are all welcome here. Dr Erlakat switches adeptly from Arabic to Hebrew to English – a necessary skill in these parts. She asks if I drink coffee and I make the mistake of not admitting my disgust at that bitter poison – she buys me a Turkish coffee, only the strongest coffee known to man. At least, that is what I reckoned after taking a sip. Could there be a drink in this world more bitter? Hints of cinnamon do little to ease my suffering. In an attempt to end this horrible experience the bright idea of downing the coffee in one gulp springs to mind and I am at the point of vomiting as I reach the yet more bitter bottom of the cup where a

thick paste has settled. I gargle with water while she is not watching, but alas, she can still hear. “Not keen?” she asks. “Not keen”, I reply.

Clinic comes to an end and I settle into my now familiar routine of dinner in the canteen, a gaze into the sky to witness the fabled super moon owning the night sky, retirement to my warm and cosy room, and sleep (at 2am, not having built any caffeine tolerance prior to today’s experience).

Tuesday

I spend today in theatres with Dr Abdallah, corneal surgeon, and Dr Mohammed, vitreoretinal. The theatre team is warm and embracing, and I feel very welcome indeed. Dr Mohammed’s first case is a child from the West Bank with penetrating trauma from a metal foreign body a few months ago – by the time he finds himself in St John, his traumatic cataract is beyond repair, his vitreous fibrinous and retina scarred, with a grossly swollen optic nerve head. How did he get the injury, I ask? “Maybe he was playing, maybe it was explosive shrapnel” comes the reply. Food for thought that these are the main differentials. Dr Mohammed delicately, precisely and efficiently repairs the damage. “Perhaps he will regain some vision – we can hope” he utters as the operation comes to an end. For him, there is nothing surprising or noteworthy about the case. For me, I have never seen such trauma, with such devastating consequences, left for so long before surgery – perhaps it is because of my limited ophthalmological experience, or perhaps this sort of thing is not permitted to happen in the UK, where access to healthcare is available to all without limitation.

Wednesday

Today I meet a most remarkable woman – one whose utter selflessness has never received widespread recognition, although this does not bother her in the slightest since that has never been her motivation. Judith Musallam is an English orthoptist from a small town near Sevenoaks, Kent. A three month voluntary posting at St John’s in the early 1980s transformed into the devotion of half of Judith’s life to building St John’s orthoptist department from scratch. Running the service singlehandedly for several years (in fluent Arabic that she learnt from patients, no less), she soon realised that this was unsustainable – other permanent orthoptists were required to help provide the service for ever increasing patient numbers from Gaza and the West Bank. The problem was that there was no orthoptist training programme in either Israel or Palestine to recruit from. The solution? Together with visiting orthoptist Jane Tapley and others, she built from scratch an education programme to train a new generation of orthoptists. Four Palestinian nurses have now completed this training and help to run the service. They are yet to receive official registration, however – an issue which Judith continues to fight for. Neither Israeli nor Palestinian health authorities wish to recognise these professionals – this despite them sitting, and passing comfortably, the exit exams from the recently created orthoptics course at Tel Aviv University. “Politics”, Judith sighs, exasperated but still determined as she tells me her next steps in pursuit of registration for her orthoptists. She and her team deserve this.

Thursday

Oculoplastics with Dr Bashar, reads my timetable. ‘Dull!’ I cry and trudge grudgingly to clinic. My preconceptions are ill-informed and incorrect. Dr Bashar is inspiring in the way he communicates with his patients – even though I cannot understand the content of his discussions with patient and family members, the mutual respect between patient and doctor, and focus on patient-centred care, is clear regardless. It seems as if the entire oculoplastics curriculum passes through this single clinic – I see people with ectropion, entropion, ptosis, epiphora, cysts, madarosis, likely lymphoma and

haemangioma all before 3pm! Dr Bashar adeptly and succinctly teaches me the salient points for each patient's condition, and I soon realise oculoplastics is anything but dull. For one of his patients he has corrected a severe ptosis with a fascia lata brow suspension, the technique for which he tells me he learnt from oculoplastics consultant Mr Anthony Tyers, who would visit St John yearly. No doubt, Dr Bashar will teach his trainees the process of fascia lata harvesting, and thus the technique will be transferred to dozens of doctors to help hundreds of patients. The case for the value and importance of having clinical leaders from worldwide visiting and transferring skills in both directions could not be made more clearly than from this example of sustainable improvement.

Friday

Eager anticipation mixed with apprehension greet me as I awaken – today is the day I join the outreach team to watch as they provide care to remote towns and villages across the West Bank, where medical care is otherwise non-existent. To see this part of the world with my own eyes is something I had never previously imagined, but I am immensely grateful for the opportunity. Nasser, staff nurse, greets me warmly and tells me that today's destination is Burin, a remote village near Nablus with population circa 2800 that has existed for nearly 1000 years. We check the slit lamp, acuity charts, medication, Dr Mohammed, and of course, breakfast, are all on board and set off promptly.

It is a beautiful undulating landscape that surrounds our van, but stark in its barren nature – apart from occasional fields of olive trees, there is emptiness for miles on end. Watchtowers loom over the main road every few miles, and military vehicles and armed soldiers are a frequent sight.

The people of Burin have gathered in the town hall by the time we arrive. We carry the slit lamp and other equipment up to the room that will serve as a makeshift clinic, set up, and then it is of course time to pause for breakfast! The nurses and Dr Mohammed are a slick team – patients have their acuity assessed and a brief history taken before their turn with the doctor. There is a whole spectrum of illness – from the worried well who understandably wish to take advantage of the once yearly visit by an ophthalmologist, to refractive errors, cataracts, posterior capsular opacification, eyelid coloboma, and a case of sudden onset counting fingers vision, photophobia and vitreous haze. This is a triage service – whether people need urgent treatment, or simply refraction, they are instructed to visit the permanent outreach clinics in Anabta or Hebron. It is a remarkable service, and it serves its triage purpose excellently, although it is frustrating not to have diagnostics and refractive services on tap – something which I have certainly taken for granted previously.

Soon everyone has been seen and it is time to return. We stop at a local mosque for the staff to pray, and then it is the long trip back to St John, passing by Ramallah on the way to drop off the doctor and a few nurses who live there. We reach St John in the early afternoon (the team were very efficient indeed in seeing patients!), I sit with Brigadier Tom for lunch, and then it is time for another jaunt round the Old City to absorb the sights, smells and sounds of a bygone era.



Temporary clinic, Burin town hall



Burin

Saturday

Today I realise that my bargaining skills are not cut out for a place like Old Jerusalem – the seasoned traders recognise their vulnerable prey from a mile off (do I not look like a local? Is it the camera around my neck?), lure me with cries of ‘ni hao’, and quite literally trap me in the store, standing between myself and the exit, until I either buy something or literally push my way out. I buy a miscellany of goods of dubious quality (‘the finest Jerusalem craftsmanship from locally resourced stone of the holy land’ I am told) as gifts for family and friends, then realise I am running out of money due to my aforementioned lack of bargaining skills and head home with an empty wallet.



Cotton Merchant Market, Old City of Jerusalem

Sunday

A tour to the ancient (we're talking 2000 years old here) hilltop fortress of Masada, and a trip to the Dead Sea, are on the menu today. I join a tour group on a minibus and marvel at the diversity of our group, with representation from all continents. Many, like myself, are travelling alone, and we soon make friendships to last at least till the end of the day.

Masada is an astounding feat of engineering – a three-tiered fortress built on the top of a rock plateau overlooking the Dead Sea, built by Herod the Great in 37-31 BC. The ingenuity in its water supply method and once lavishness of its palace (now requiring a great deal of imagination) are awe-inspiring. Its story is told by Joseph, a Romano-Jewish scholar of the era. The tale told is that when the Romans sacked Jerusalem and destroyed the Second Temple in the first Jewish-Roman war 70 AD, a group of Jewish rebels, the Sicarii, fled and captured the fortress from the occupying Romans. This became the last stronghold of the Jews, to which the Romans lay siege in 73 AD. When the ramp to the fortress was complete, the Romans knocked down the walls with a battering ram and stormed the fortress, only to find that the Jews dead and buildings burnt to shells. Sicarii leader Elazar ben Yair had asked the Jews – “Since we long ago resolved never to be servants to the Romans, nor to any other than to God Himself, Who alone is the true and just Lord of mankind, the time is now come that obliges us to make that resolution true in practice ... We were the very first that revolted, and we are the last to fight against them; and I cannot but esteem it as a favor that God has granted us, that it is still in our power to die bravely, and in a state of freedom.” Each family head was responsible for killing his wife and children, before the men drew lots to kill each other in turn, till one man was left who would then commit suicide – this to minimise sin as Judaism prohibits suicide.

Till this day Israeli Defence Force soldiers who have completed their basic training swear “Masada shall not fall again” as they take their oath. The story, regardless of its veracity, is a symbol of national identity for the state of Israel – a symbol of Jewish heroism, self-sacrifice, and refusal to submit to evil.

Next is the Dead Sea, which I am told is disappearing at an alarming rate due to use of water for irrigation from its only supply, the Jordan river, together with rapid evaporation. I am fortunate to visit while it still exists – there is still room for our tour group at least! Its shrinking area is evident from the enormous distance between the surrounding fencing (to prevent people falling into surrounding sinkholes of which there are plenty) and the present water’s edge. I edge dubiously into the water, crouch down, raise my legs and lo! I am floating! Without a flicker of movement from my limbs. The fact that I cannot swim is irrelevant today. It is a wonderful experience – I wish all swimming was like this. Others are braver than myself and cake themselves in mud from the seabed, with its supposed healing properties. I leave them to it.

A quite remarkable day.



Ruins of the Fortress of Masada



Testing the waters at the Dead Sea

Monday

Today I join Dr Islam and team for outreach to the small town of Azzun in the northern West Bank in the region of Qalqilya. It is a long drive through winding roads, and it seems our driver is determined to beat a Google Maps estimated arrival time—I feel quite queasy by the time we arrive! We unload at a school and set up shop in an office and a classroom, then break fast as tradition dictates. There is a diabetes review clinic occurring concurrently at the school today, so many patients today are attending for routine diabetes eye screening. There is a huge spectrum of pathology, including one person with a tractional retinal detachment, fibrovascular membrane and vitreous haemorrhage who is informed that she should attend the Jerusalem hospital as soon as possible. Dr Islam reminds me that this would be a rare sight in the UK, and poor access to healthcare makes pathology like this lady's much more common here than it should be in this day and age. Patients with retinal vasculitis, diffuse corneal oedema, and macular hole also pass through today's varied clinic, and are directed to either the permanent outreach clinics or Jerusalem as appropriate. Dr Islam's efficiency means we begin our journey back to Jerusalem by 1pm, and I try my best to avoid vomiting on the way.



Temporary Clinic, Primary school, Azzun

Tuesday

Corneal clinic with Dr Abdallah today. It is inspiring to see that Dr Abdallah, so precise and delicate in performing the DALKs and PKPs I watched last week, is equally as skilled in interacting with and managing patients in the clinic. He is a natural teacher, and helps me to recognise signs I have spent so long studying but have not till now seen in person. Two patients present with severe neglected corneal ulcers and associated descemetocoeles, and for one of them, Dr Abdallah chooses to list the patient for a Gundersen flap to save the eye first and foremost, and deal with vision at a later point in time. What strikes me is that for the people of Palestine, eye care is of course scarce, caused both by geopolitical limitations and a lack of public health education regarding when to seek help. However, once people are able to enter St John's system, whether via outreach or in Jerusalem, they receive world class care – a truly remarkable achievement bearing in mind the scarcity of funding and regional instability. Its model is one from which all healthcare systems can learn.

Thursday

Brigadier Tom has kindly invited me to today's formal opening of St John's outreach clinic in the Muristan, centre of the Old City of Jerusalem. This was the location of the original hospital of the Knights Hospitaller, built in approximately 1023 by Gerard Thom to care for sick pilgrims to the Holy Land, on a site previously occupied by the monastery of St John the Baptist. This association would result in the name of the religious and military order that sprung from the original hospital – the Order of Knights of the Hospital of Saint John of Jerusalem. Today's Order of St John traces its roots to this ancient order.

The clinic and its gardens are a marvellous sight, retaining their ancient features and earning their place in this historic area, whilst also achieving their primary function as an outreach eye clinic ably. The renovation of the site has been made possible by a donation from Canadian billionaire and philanthropist Dr Michael Dan, a hugely generous and sincere gesture. He, together with the CEO, main architect, and sculptor Mark Coreth (who has designed a symbolic olive tree sculpture with 150 swifts emanating from its branches) give speeches and unveil an opening plaque. Then, led by

hospital driver George, the awesome sight and sound of a Palestinian pipe band, based in the Palestinian scout movement, emanated across the gardens. Truly an intriguing and inspiring cultural amalgamation, in a land more accustomed to cultural divisions. After a tour we sit for lunch, and I chat with an Italian public health consultant who is responsible for the EU funding contribution to the clinic. He tells me about the public health initiatives he has been working on in the West Bank – we agree that public health promotion and education, together with improved accessibility of healthcare resources, are key for the region. He tells me about a recent televised meeting between the minister for health and religious leaders from Islam, Christianity and Judaism promoting mammogram screening and other initiatives, which was seen by a significant percentage of Palestinians and resulted in increased screening attendance. This is a brilliant initiative – this momentum must now be carried forward by Palestinian grassroots to continue the drive for improved health in the region.

Lunch ends and I say my thanks to the CEO for his kind invitation to today's event (I address him as 'Brigadier Tom' which provokes a bemused smile – I don't think that's what I am meant to call him...) and wander around the Old City once more. I cannot resist ordering my favourite lamb kofta despite being full from lunch, and proceed to waddle home thereafter.



Tree of Hope Sculpture, Mark Coreth



Palestinian scout pipe band, Opening Ceremony, Muristan Clinic

Friday

My final day at St John Eye Hospital – time has truly flown. I sit with Dr Habes Batta today, paediatric subspecialist, as well as Judith, the orthoptist whom I met last Wednesday. Dr Habes has the affable and humorous approach required of the subspecialty, with the knowledge and skill to match. We see children with squints, cataracts, Duane syndrome (especially common in this area Judith tells me), and Judith recognises a child with the unmistakable features of Williams syndrome – the sunken nasal bridge, the long philtrum, wide smile and small spaced teeth. The child will hopefully receive the screening she requires now thanks to Judith's keen eye.

After the clinic I find Maureen, Dr Garth and Brigadier Tom to thank them once more for this once-in-a-lifetime opportunity to observe this special institution first-hand, and say my farewells. Then it is time to pack, although this is not a daunting task having lived out of my suitcase for the duration of the trip!

Saturday

George, who I last saw and heard playing the bagpipes with awesome skill, drives me to the airport 4 hours before my flight. I have never left so early for a flight before, but I have heard about the formidable security at Ben Gurion airport which has caused many a naïve tourist to miss his plane. We chat, and I learn that George lives next to the Church of the Holy Sepulchre, and attends services there when it is quieter. It is astounding to me that people can live normal lives in the heart of old Jerusalem now just as they did thousands of years ago, what with the huge tourist presence nowadays. It is a reminder that the thousands of years of history that draw tourists to the region must be protected against erosion secondary to that tourism, so that it can still be cherished and valued a thousand years from now.

Security at the airport certainly lives up to my preconceived expectations, with no fewer than 3 layers of security to pass through including a thorough interview about my trip (I may have gone on for a bit too long when asked about the purpose of my trip. I am not sure if the inspector knew

about, or cared about, the Duke Elder Prize Examination...) Eventually my interviewer let me pass, having narrowly escaped death by boredom. My flight is pleasant and soon my trip is at an end.

I cannot stress my gratitude to the Royal College of Ophthalmologists and the people of St John Eye Hospital for affording me the privilege of this visit. It has been a humbling experience which has brought me far out of my comfort zone and opened my horizons – to see the potential to make a tangible difference for people not fortunate enough to have full and free access to modern medicine, such as in the UK, has inspired me to contribute in my own small way once I possess the skills. But I have realised from this visit that such contribution would only have a minute impact on the ocular health of the region. Rather than a well-meaning single visit, help needs to be sustainable – to be able to continue and grow long after the contributor has left. Contributing to optimisation of the education programme for residents, and to the strategic co-ordination and delivery of eye healthcare and education to the people of the West Bank, should make a long-term impact and help thousands, rather than hundreds, of people in need. I hope to do my part one day.