

CWJ Short Fellowship to Clinique Jean Causse, Béziers

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There was a particularly convivial air surrounding the 22nd International Otology Course at the Clinique Jean Causse in Béziers. This prestigious and world-famous centre was forced to cancel its courses in 2020 and 2021, like many around the world during the coronavirus pandemic. My chaotic journey to the South of France - marred by flight delays, an in-flight medical emergency, airport staff strikes and airport closures culminating in a long, expensive taxi journey from Marseille to Béziers in the middle of the night - meant that arriving in the quaint village of Colombiers for the start of the pre-course was truly like being transported to the Elysian fields.

As befits the home of lauded heroes, we were welcomed by Dr Robert Vincent who guided our small group around his unit for the few days before the course began. On our first day we were able to witness first-hand the masterful clockwork of the Causse clinic theatres. Few words were spoken as the small team of experienced anaesthetist and scrub nurses prepared the patient efficiently for stapes surgery. Despite working in a theatre approximately half the size of most NHS theatres, space seemed to be utilised particularly efficiently: the Zeiss microscope is ceiling-mounted and two large monitors are wall-mounted so that the theatre team (and any observers) can watch the action in high-definition. The patient is prepped and draped ready for Vincent's arrival. Then it is like watching masters at work. I use the plural because it is the team work, as much as the beautifully deft handiwork of Vincent, that is so impressive. Not only is the surgery performed with economy of movement, but economy of words – a practical example of Flaubert's *le mot juste*. Of course, this comes with practice – a lot of it. Vincent has personally performed over 6,500 primary stapes surgeries, not to mention the almost 3,000 revisions (rarely his own).

Some of the differences between the Causse technique and the techniques I have seen in the UK are the positioning of the patient to enable a vertical positioning of the speculum, the use of a vein interposition graft and the use of the 0.4mm Causse Teflon piston. Vincent uses a CO₂ laser for the crurotomy and a combination of CO₂ laser and Osseostap (Bien Air) drill with 0.7mm burr to perform the stapedotomy. The Causse team also give their stapes patients two doses of 120mg IV methylprednisolone after surgery and admit them for 5 days with an initial post-operative audiogram at 5 or 6 days to pick up any early complications. The logic of the vein graft is to seal the labyrinth after the stapedotomy, thus performing part of the role of the annular ligament of the stapes footplate, and provides some elasticity to the movement of the piston. The intima of the vein is placed facing the piston as it is "non-stick", whereas the relatively "sticky" adventitial side is placed down onto the stapedotomy. Fluoride treatment for otosclerosis is also standard practice at the Causse clinic, with 2mg fluoride recommended for every patient with the disease, including those who undergo surgery, with an aim of continuing treatment for several years to reduce the risk of progression to cochlear otosclerosis.

The rest of the pre-course was then a combination of seminars led by Vincent and observing in theatre with either with Vincent or Thibaud Dumon, one of the other senior otologists at

the clinic who takes on much of the cholesteatoma surgery. This was interspersed with the obligatory wine-tasting at a local vineyard, almost Bacchanalian lunches at the clinic (wine optional, but always available) and cycling along the Canal du Midi (the 17th Century canal that runs from the Atlantic to the Mediterranean, past the Causse Clinic). During the fellowship I stayed in the ancient centre of Béziers – highly recommended – and hired a bicycle for the pre-course (taxis are very expensive from Béziers to the small village of Colombiers where the clinic is situated). There is a free shuttle from central Béziers to the clinic for the days of the main course.

The course was attended by delegates and faculty from around the world and included a combination of live surgery, lectures and round-table debates. The advantage of attending rather than watching it all on Vincent's YouTube channel (a fantastic resource!), is the ability to engage with the friendly and learned faculty, and to rub shoulders with fellow otologists from around the world. There is a great sense of camaraderie fostered by the course faculty, many of whom have taught on the course for several decades and are clearly close friends. There was a plethora of tips and tricks for middle ear surgery to take home, and the course is tailored towards senior trainees or Consultants.

After the day dedicated to stapes surgery, there was a day dedicated to ossicular reconstruction, which was particularly fascinating. Following in the footsteps of Jean-Bernard Causse himself, Vincent is also an inventor and has pioneered several novel ossiculoplasty prostheses. He told us of his personal journey from PORPs towards TORPs even in the context of an intact stapes superstructure. He designed the Vincent Alto prosthesis, amongst others, which is a TORP that runs from under a repositioned malleus (a novel technique for me) and uses a silastic band around the head of the stapes which is tucked underneath a cut stapedius tendon (he makes light work of putting this onto a stapes with a mobile footplate!). We saw two cases with no ossicles for which a titanium malleus replacement prosthesis (extending from two 0.6mm holes drilled in the scutum) was used prior to the use of either an Alto prosthesis or a malleus-stapedotomy Teflon piston. Of note however, Vincent rarely uses titanium PORPs and prefers to use hydroxyapatite which can be drilled like bone and customised easily to the patient, without the need for cartilage drum reinforcement. The data to support his arguments for his personal use of TORPs over PORPs is impressive, and one of the take home points for me was the importance of data collection. He uses the free programme ONDB.org, for which he is also the Scientific Supervisor, and has amassed a monumental single-surgeon record from his career to date.

The week was completed with a superb course dinner at a beautiful château, attended by faculty and delegates and complete with a live band and dancing into the night! I am immensely grateful to the course organisers, the course faculty, the staff at the Causse clinic and the TWJ Foundation for such a rich opportunity to learn from the French masters in Béziers – it was an experience I will never forget.