INTERVIEW – PROF. DANIEL VAN DEN HEUVEL

In advance of CIRSE 2021, we've spoken to presenters from some of the most interesting sessions in order to give you a sneak peek at what you can expect from the congress!

Focus session: Deep venous arterialisation for no-option CLTI patients

CIRSE: What benefits does percutaneous deep venous arterialisation (pDVA) offer for patients?

van den Heuvel: At the moment, this treatment is currently being performed in patients who have no other revascularisation treatment possibilities, typically due to the absence of target vessels to revascularise either endovascularly or with a surgical bypass. Without treatment, a large percentage of these no-option patients will suffer from chronic wounds, pain and likely undergo a major amputation. We have seen that pDVA can resolve ischaemic pain almost immediately after the procedure and over time provide the necessary perfusion to heal wounds. Even in cases where it is not possible to save the toes and a trans-metatarsal amputation is required, patients are offered a last resort treatment, potentially saving the limb, keeping them ambulatory with healed wounds and thereby contributing to an improved quality of life.

CIRSE: How do you think this technique will change current treatment algorithms?

van den Heuvel: As mentioned, this treatment is currently performed in patients with no other options to revascularise the limb. In my practice, these patients are now all screened for pDVA before considering a primary major amputation. We initially started treating only patients with Rutherford 5 and 6, however due to the success of these treatments, we have now expanded to also treat Rutherford 4 patients. It is possible that in the next years we'll be treating patients in an even earlier stage, before the no-option situation arises.

CIRSE: What does the latest data suggest regarding pDVA's efficacy?

van den Heuvel: The multicentre ALPS[1] and PROMISE I[2] studies that have been presented and published in the last year have shown consistent limb salvage rates over 75% and survival over 80% at 12 months. These are impressive outcomes given the end-stage condition of the patients treated. We have learned that the procedure itself is well tolerated and has a high technical success rate exceeding 90%, but that the postprocedural care is actually the most critical part. With a better understanding of the postprocedural maturation of the pDVA circuit and appropriate timing of wound debridement and minor amputations, we are able to standardise the overall treatment and are continuously improving the results.

CIRSE: What further studies are required to fully prove the treatment's value?

van den Heuvel: The ongoing PROMISE II study for FDA approval in the US and the PROMISE International post-market study in several countries should provide significantly more evidence on the safety and efficacy of pDVA which will be important to establishing the procedure as the standard of care for no-option patients. It would be very interesting to focus the next phase of research on high-risk CLTI patients that have not yet reached the no-option stage, and also understand which underlying conditions, such as significant pedal medial artery calcification or chronic kidney disease, can be potential indications for this treatment.

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FS 2807 Deep venous arterialisation for no-option CLTI patients

2807.1 What is the current evidence for DVA?
D. Van den Heuvel (Nieuwegein, NL)
2807.2 The ideal patient and expected outcome
C. Del Giudice (Paris, FR)
2807.3 Technical approach
R. Ferraresi (Bergamo, IT)
2807.4 Open questions in DVA
S. Kum (Singapore, SG)