

## Our experience of DM foot and PAOD

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林琮凱 林承志 林茂仁 許弘昌  
中國醫藥大學附設醫院骨科部

**Introduction:** Treatment of DM foot ulcer is always a challenge, even with adequate debridement, and it usually combined with peripheral arterial occlusive disease which may add on difficulties of the wound healing. Here we show you our experience about treatment of DM foot with PAOD and our suggestions as a reference materials.

**Materials and Methods:** In 2012~2013, we collect total 35 patients who suffered from DM foot ulceration with PAOD. All the patients were type II DM and were diagnosed PAOD by Ankle-brachial index/echo/CT angiography. All patients received adequate debridement. We collect data including age, ABI, debridement times, amputation level, intervention method of PAOD, ex: Percutaneous Transluminal Angioplasty(PTA), plain old balloon angioplasty (POBA), and hospital days.

**Results:** We collect total 35 patients with DM foot ulcer and PAOD, 19 male and 16 female. 10 patient had ESRD under hemodialysis. 13 patient had amputation surgery( 6 cases with below knee amputation and 7 cases with toe amputation; all ). 6 patient with moderate to severe PAOD(ABI<0.7) had more hospital days(33.5days compared with total 28.9 in average of all patients. Hospital days of Patients with ESRD:30.2days, receive PTA or POBA:28.6days, Vacuum assist dressing cases:31.9days and amputation cases:32.9days

**Discussion:** In our small case number data, patients with ESRD, received intervention of PAOD, Vacuum assist dressing or received amputation may not decrease hospital days. But we noticed that patient with severe or moderate PAOD (ABI <0.7) seem had more hospital days(33.5days compared to 28.9days in average). DM foot ulceration always combined with associated or accompany disease (including PAOD and renal insufficiency) and these may complicate the clinical result of the treatment. Adequate debridement may also affect the results. As a complicated disease, there seems no gold standard for the treatment, and there are more and more neo-technique or materials (including PRP/hydrogels) used on it. We need further experience and research to make a perfect treatment.

使用胸管真空傷口癒合治療法成功治療復發性黴菌膝關節假體周圍關節感染  
A Successful Vacuum-Assisted Wound Closure (VAC) With Chest Tube  
Treatment For Recurrent Fungal Periprosthetic Knee Joint Infections

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曾準 王世杰 許弘昌  
中國醫藥大學附設醫院骨科部

**Introduction:** Prosthetic joint infection with *Candida* is uncommon, and occurs in approximately 1% of all PJIs. Only less than 200 cases were reported, whereas recent data have indicated that fungal periprosthetic joint infections might pose an increasing problem in the future. Recent analysis had proved two-stage revision is recommended for treatment of fungal hip and knee prosthetic joint infections. However, the successful rate of Staged revision was about 85%. We used Vacuum-Assisted Wound Closure (VAC) with chest tube after DAIR(debridement, antibiotics, irrigation, and retention) for a 75 year-old female with recurrent fungal periprosthetic knee joint infection.

**Materials and Methods:** A 75-year-old woman with chronic *Candida glabrata* infection of a prosthetic knee joint. 2 stage treatment protocol with implantation of Palacos-antibiotics bone cement spacer were used followed by antifungal therapy. The involved knee joint was reimplanted 6 months after initial treatment. However, recurrent infection with same pathogen was noted after two months ago. Negative pressure 120mmHg-VAC with chest tube was inserted into lateral supra-patella porch after DAIR(debridement, antibiotics, irrigation, and retention).

**Results:** There are no signs of inflammation or infection after the following up at our Out-patient department. The following lab data with C-reactive protein and erythrocyte sedimentation rate were all returned to normal range. The active range of motion is 0° to 80°. Loosening of the prosthesis is not evident on follow up radiographs.

**Discussion:** Fungal periprosthetic infections are extremely uncommon, with only less than 200 cases were reported in the literature. Jesse et al, reviewed 164 cases of Periprosthetic fungal infection and found no evidence that 1-stage revision, debridement, antibiotics, irrigation, and retention (DAIR) or antifungal therapy without surgical treatment adequately controls fungal PJI. Thus, staged revision should be the standard treatment for fungal PJI. According to Xu D. et al, VAC combined with debridement was used in bacteria PJI and it can drainage deep infection sufficiently, promote wound healing, reduce recurrent infection rate, and maximize the possibility of prosthesis preservation. As our clinical experience, we successful treat recurrent fungal PJI with the use of VAC after adequate DAIR.