## ملخص البحث الثامن تاريخ النشر اغسطس 2023

Possibility and predictors of Surgical salvage of infected mature arteriovenous fistula for hemodialysis.

## **Abstract**

Background: Infection in arteriovenous fistula (AVF) is a common complication in patients with end-stage renal

disease (ESRD) requiring dialysis. The standard management includes ligation of the AVF to prevent the

progression of septicemia. Till now, there is limited evidence on the effectiveness and possibility of salvage of

infected AVFs.

Aim: To evaluate the effectiveness and safety of salvage of infected mature autogenous AVF.

Methods: This prospective study was conducted at the Fayoum University Hospital from September 2015 to April

2023. We included patients with dysfunctional and functioning infected AVF. Patients with infected synthetic grafts

and immature infected AVFs were excluded. We aimed to excise the infected part of the vein wall and surrounding

tissues to restore fistula patent and functioning after direct vein repair. We followed up with all patients for 1 year

and examined the repaired AVFs for patency and the possibility of reinfection. Tissue cultures were obtained to

identify the commonest responsible organism and the recommended antibiotics.

Results: A total of 46 patients with infected AVFs were included. At the end of the follow-up period, 11 patients

were ligated, and 35 underwent AVF salvage procedures. 19 cases experienced some complications: 5 cases had

hematoma required surgical intervention, 2 cases had hematoma managed conservatively, 2 patients had wound

dehiscence, 3 patients required hybrid angioplasty for acute failed AVF, 7 cases required angioplasty for failing AVF

Conclusion: When performed correctly and with expert hands, salvage of infected mature AVFs seems possible

with excellent efficacy and high patency for up to one year.