Ischemic hand in the dialysis patient

CASE 1 **T.P.**: 56, male , insulin-dependent diabetic x30 years

dialysis x 4 years,ischemic hand x 6 months

gangrenous digits x 2 months,painful,ulcerated and draining

repetitive fingerpricks for glucose testing leading to tissue necrosis

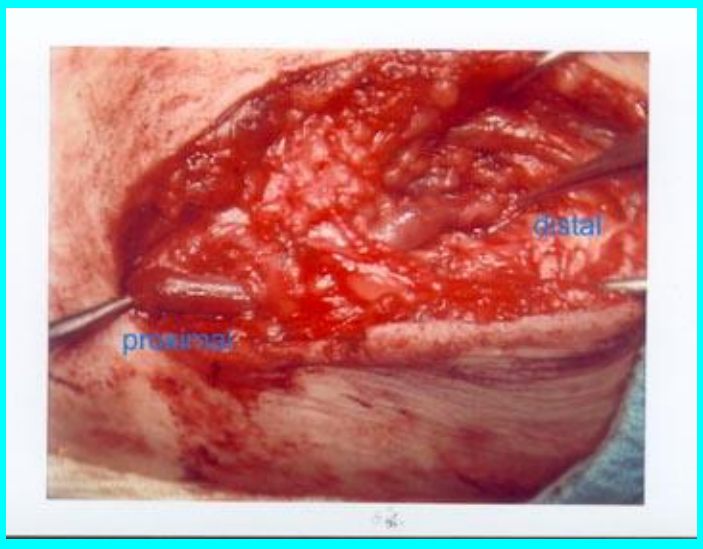
Clinical presentation similar to a reflex sympathetic dystrophy with no pulse palpable or present by doppler.The pulse returned with occlusion of the fistula.Failure of angio and MRA to delineate the problem.

Options 1) ligate fistula and loose access

2) amputate the digits

3) do nothing and maintain status quo

4) innovative bypass

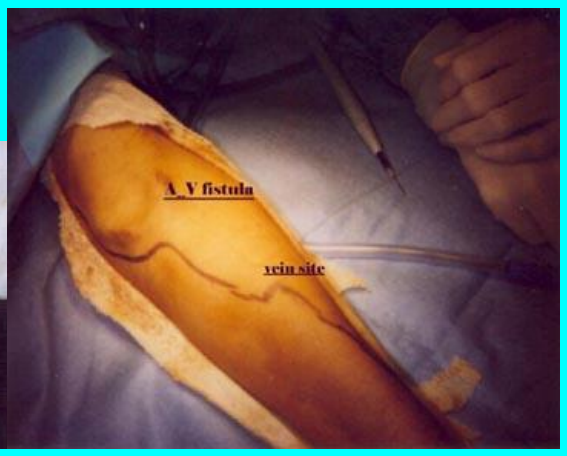


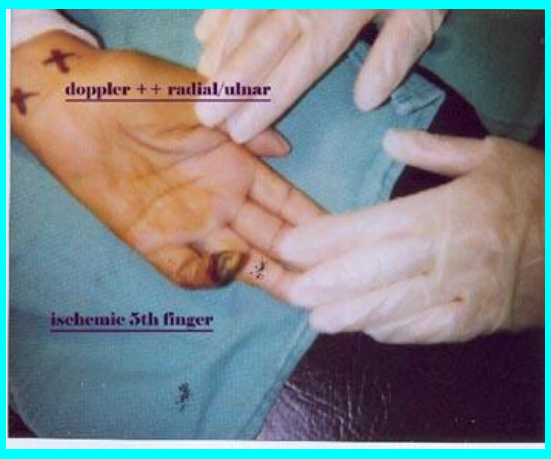
Innovative bypass from arterialized venous outflow tract to proximal radial /brachial complex below fistula .Post op,marked improvement in color of hand ,relief of symptoms,increased warmth and return of doppler signal.

CASE 2 **A.S**. 65, insulin dependent x 20 years

previous leg amputation

dialysis x 3 years





Similar innovative bypass, increased warmth, good doppler return. However,digit loss despite return of triphasic signal

The presence of a steal syndrome in dialysis patients particularly diabetic can be a frustrating and painful situation, The innovative bypass is a reasonable solution using the artery above the fistula with distal revascularization or the arterialized venous segment with distal bypass. Other solutions include partial or total ligation of the fistula or amputation to maintain the fistula.