**Introduction**

Scar pregnancy is a rare form of ectopic pregnancy. There is no consensus on the treatment modality. Follow up of efficacy of treatment is therefore imperative. Volume Calculation (VOCAL) is a 3D-technique which, in combination with Power Doppler, allows measurement of a vascularity index (VI). The vascularity index illustrates the amount of vessels supplying the pregnancy.

**Cases**

Case 1: gestational age of 9 weeks, managed with mifepristone and methotrexate, intramuscular and intra-amniotically. Follow-up: hCG-level + sonography (gestational sac volume and VI). Figure 1 & 3.

Case 2: gestational age of 6 weeks, managed with methotrexate, intramuscular and intra-amniotically. Follow-up: hCG-level + sonography (gestational sac volume and VI). Figure 2.

**Discussion**

The VI seems to be more accurate than the gestational sac volume in the follow-up of treatment of a scar pregnancy. Since scar pregnancy is rare and management therefore is difficult to optimize, the VI can, in addition to the hCG levels, help evaluate the efficacy of treatment.

**Conclusion**

The VOCAL-measured Vascularity Index is possibly a useful tool in follow-up of scar pregnancy treatment.