Department of obstetrics and gynecology GUIDELINES

MAS University hospital

**Clinical management of patients with normal pregnancies and normal blood flow in umbilical arteries, but with signs of increased flow resistance in uterine vessels**

Study which was performed at our clinic in the 1990, taught us that signs of vascular flow resistance from the maternal side of placenta are more important than from the fetal side. So, the fall is the only sign of increased resistance from the maternal side of placenta. This should be considered as a fall which need to be observed even if it is not complicated with preeclampsia or IUGR.

Signs of flow resistance in uterine-arteries system expressed in uterine arterial score (UAS) are following:

**UAS 0** – normal uterine-arterial blood flow in both vessels

**UAS 1** – one abnormal parameter in one vessel (PI >1.2 or notch)

**UAS 2** – two abnormal parameters

**UAS 3** – three abnormal parameters

**UAS 4** – increased PI (>1.2) and presence of notch in both vessels

It is unclear how these pregnancies should be managed. The guidelines recommend the following:

**UAS 0-1 -** Proceed control in ordinary antenatal out-patient clinic if no other indications

emerge

**UAS 2** **-** Proceed control in ordinary antenatal out-patient clinic. Examine flow and visit

obstetrician once a month if no other indications emerge.

**UAS 3** **-** If ultrasound finds no changes in comparison with previous weeks, assess the

growth and visit obstetrician. If weight is not more than -10% from expected, control blood flow and visit obstetrician every third week. If weight is more than

-9% from expected, examine blood flow and growth, and also visit doctor at high-risk antenatal out-patient clinic every second week.

**UAS 4** – Control of flow once every week or control of growth every second week. Visit

high-risk antenatal out-patient clinic every week, interchange visits to midwife and obstetrician.

If some complications emerge, for example, IUGR, diabetes or manifestation of preeclampsia, the patient should be managed according to the given guidelines for management of complications.