

## **Interview with Dr. Susanna Timonen, Turku University Hospital in Turku, Finland.**

*One of the centers where the AFL method is used is Turku University Hospital in Turku, Finland. We have interviewed Susanna Timonen, MD PhD, who has been one of the pioneering users, and discussed her experiences with the AFL method in her clinic.*

### **Dr. Timonen, when did you start using the AFL method and what is your experience so far?**

We started about one and a half year ago. For the first time we can now pay more specific attention to the status of the uterus during labor. It is actually interesting how little we know about the function of the uterus during childbirth. The contractions during labor cause changes to the otherwise quite stable environment of the fetus. Therefore, it's very important to understand what effect the contractions have on the baby.



Susanna Timonen, MD PhD,  
Turku University Hospital

For the uterus, labor is like a marathon. The uterine muscle becomes gradually more exhausted over time, in particular if it is forced to work too intensively without resting. With the use of oxytocin, the risk for overload is increased and the muscle may become completely exhausted before the baby is delivered. The same could happen with us if we were forced to run a marathon too fast: we would be completely exhausted before even reaching the finish line. Before the AFL method was introduced we had no possibility to monitor the work load of the uterus.

***What is from your point of view unique with the AFL method?***

As pointed out, this is the first time we can really measure what's happening with the uterus during labor. Today we use oxytocin extensively and thereby increase the risk of overloading the uterus. With the AFL method we can monitor the stress of the uterine muscle and administer oxytocin correctly.

***Can you please share some experiences using the AFL method in your department?***

My clinic is in a large university hospital with many doctors and midwives. The implementation of a new method takes time and requires repetitive training sessions. This method is simple to use and the physiology behind it is rather easy to understand. By reviewing our own cases we are able to discuss the importance of the measurements and learn how to understand the AFL method better and make it more familiar to the staff.

***Can you briefly explain in your words the correlation between oxytocin and the AFL method? In other words, how would you use the AFL method together with oxytocin?***

Oxytocin is a potentially dangerous drug if it is used incorrectly. Today one could argue that we are using it quite uncontrolled. In some delivery units in Finland more than 75% of patients are stimulated with oxytocin. It is not always a benefit for the baby to rush the birth process. Too strong and extended contractions compromise fetal oxygen supply and increase the risk of asphyxia. For the uterus, abnormal contractions increase the risk of exhaustion and thereby the risk of a prolonged or halted progress of delivery.

By using the AFL method, we can control the ability of the uterine muscle to contract and administer oxytocin properly. If the mother has spontaneous contractions but there is no progress, we consider measuring AFL before starting oxytocin. If we have used oxytocin and there is still no progress, we will check the AFL value. If the value is high, we stop oxytocin and wait for 1-2 hours. If the value is then normalized, we start oxytocin again if the delivery is not progressing. If the value is low, we can increase the oxytocin dose if necessary.

***Can you please give us some examples of childbirth injuries which may be prevented by using the AFL method?***

High AFL values are a risk for the baby's wellbeing. Too strong and extended contractions impair uteroplacental circulation and thereby reduce fetal oxygen supply, which may lead to asphyxia. Furthermore, if the uterus becomes exhausted before the baby is born, it cannot push the fetus properly and the risk of operative delivery is increased. Vacuum, forceps and cesarean section increase the risk of complications for both the baby and the mother. If we can avoid unnecessary interventions by using the AFL method, we can reduce the risk of injuries for both the baby and the mother.

***Final question, can you please give your most important recommendation when using the AFL method?***

Make the first AFL measurement when you consider starting to give oxytocin. During the continued augmentation, if there is no progress, continue to measure AFL. Use the published reference values to decide your actions. If the value is low, you can increase the oxytocin dosage. If the value is high, stop oxytocin and wait. If the value is then normalized, start oxytocin again if there is no progress. If the value is still high, consider an operative delivery.