

## Microdialysis following Reconstructive Surgery

- To identify ischemia or thrombosis following free flap surgery

### APPLICATION

- Allows the Surgeon to continuously monitor the flap during and after reconstructive surgery
- Increased Lactate, Lactate to Pyruvate ratio and decreased Glucose levels are early indications of Ischemia
- Especially suitable for deep buried flaps

### WHICH FLAPS SHOULD AND CAN BE MONITORED?

- Buried free flaps
- Free flaps placed in the oral cavity
- Muscle flaps covered by skin grafts
- Jejunal flaps
- Difficult flap procedures with high risk of secondary ischemia

### CLINICAL MICRODIALYSIS OFFER

- Clinical publications have shown that Microdialysis offer a 4-6 hour window of opportunity for conventional treatment
- Microdialysis has proven excellent cost-efficiency
- A simple, standardized flow chart is available

### PURE MUSCLE TRANSFERS CAN BE MONITORED BY USE OF MICRODIALYSIS

*Hanne Birke Sørensen et al, Journal of Reconstructive Microsurgery, 2010*

- Our results demonstrate that Microdialysis is a powerful, safe and reliable tool for surveillance of muscle transfers.



### COST ANALYSIS OF 109 MICROSURGICAL RECONSTRUCTIONS AND FLAP MONITORING WITH MICRODIALYSIS

*Leena Stälä et al, MD, Kopio University Hospital Finland, Journal of Reconstructive Microsurgery, 2009*

- A total of 109 flaps were studied. Reoperation for anastomosis was conducted in 25% of the cases
- We found that Microdialysis provided an early diagnosis of perfusion failure and helped to save the flap
- It was estimated that if one or two flaps per year are saved due to more effective monitoring, then the extra costs of using Microdialysis are covered