

## Update in Surgery

Gheorghe BORCEAN, MD

Surgery Department, General Hospital, Caransebes, Romania

In all specialties of major surgery, the supuration of the wound is mentioned without exception as a precocious and immediate complication. The discussion about the causes of this pathological entity is endless. However, the treatment admits guiding principles that are not so numerous. Having in view the frequency of the above mentioned complication, the fact that, for an indefinite period, it implies an extension of health care and costs that cannot be estimated, any new idea of therapy is welcomed. The quoted authors register their work within the mentioned subjects.

The use of biologic markers to aid in individualizing wound treatment may help improve outcomes. A biologic marker that has been demonstrated to be predictive of healing in both chronic and acute wounds is wound

tissue bacterial level. The objective of this study was to determine whether tissue bacterial level can be used to individualize wound treatment regimens with a stem-like cell-derived product.

Amnion-derived cellular cytokine solution (ACCS) was topically applied to rat chronic wounds, and healing rates were measured.

Experimental wounds treated with ACCS demonstrated accelerated healing regardless of the tissue level of bacteria, compared with saline. As the level of tissue bacteria increased, the frequency of ACCS application required to obtain optimal results increased.

It appears that the biologic characteristic of tissue bacterial level can serve as a marker to predict the response of open granulating wounds treated with ACCS.

### REFERENCES

1. Pierpont YN, Uberti MG, Robson MC  
– Individualized, targeted wound  
treatment based on the tissue bacterial

level as a biological marker. *Am J Surg*;  
published online 27 December 2010.

*Address for correspondence:*

Gheorghe Borcean, MD, Surgery Department, General Hospital, 12, Gradinilor Street, Caransebes, Romania  
e-mail: borceang@yahoo.com