

Possible mechanism of mechanotransduction induced by external stress like shockwave application

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Device and producing company:

PiezoSon 100 Plus, Richard Wolf, Knittlingen, Germany

Introduction:

We would like to introduce a mechanism of the mechanotransduction induced by different external stress applications.

Methods:

NO was measured by chemiluminescence, reactive oxygen species by ultra weak chemiluminescence, chemical methods and ESR-spectroscopy.

Results:

External stress produced NO and reactive oxygen species, which are measured through the skin.

Discussion:

We discuss a common mechanism in mechanotransduction, which could be the answer to all stress applications.

Conclusion:

This mechanism was compared with another, in which the appearance of either reactive nitrogen or oxygen species after physical training was found.