Evaluation of allergic vesicular reaction to patch test using in vivo confocal microscopy.


ABSTRACT

BACKGROUND: Confocal microscopy has been successfully applied both in oncologic and inflammatory diseases. In particular, it has been proved as a useful tool for the in vivo detection of microscopical changes occurring in allergic reactions.

AIMS OF THE STUDY: To evaluate microscopic changes occurring in positive patch test reactions.

METHODS: Eight patients with history of allergic dermatitis and positive patch test reaction were analysed by means of confocal microscopy. RESULTS: Confocal microscopy showed the presence of spongiotic vesicle preferentially localized around the adnexal ducts that appeared to be in the middle of the spongiotic phenomena.

CONCLUSION: Confocal microscopy offered for the first time new insight into vesicle formation and development, showing that adnexal ducts can play a role in allergic reaction.