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### ACCEPTED MANUSCRIPT

#### Mechanical forces in skin disorders

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#### Abstract

Mechanical forces are known to regulate homeostasis of the skin and play a role in the

pathogenesis of skin diseases. The epidermis consists of keratinocytes that are tightly

adhered to each other by cell junctions. Defects in keratins or

desmosomal/hemidesmosomal proteins lead to the attenuation of mechanical strength

and formation of intraepidermal blisters in the case of epidermolysis bullosa simplex.

The dermis is rich in extracellular matrix, especially collagen, and provides the

majority of tensile force in the skin. Keloid and hypertrophic scar, which is the result

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