

955 The influence of finger position on percussion sounds

Van Zwieten, K.*; Potekhin, V.

Percussion as a diagnostic tool was first introduced in Vienna by Josef Leopold Auenbrugger in his *Inventum novum ex percussione thoracis humani ut signo abstrusos interni pectoris morbos detegendi* (1761). Percussion sounds of the chest are resonant sounds induced by striking one finger upon another finger applied firmly to the chest. They have the greatest content of energy in the range of 150 - 200 Hz. The character of the percussion sounds may change due to pathological processes (Sovijärvi et al., 2000). The technique of percussion is as follows. Hyperextend the middle finger of one hand and place the distal interphalangeal joint firmly against the patient's chest. With the end of the opposite middle finger, use a quick flick of the wrist to strike first finger (Rathe, 2000). The striking finger must be flexed in both interphalangeal joints simultaneously, to acquire a stable arched finger position. This is obtained thanks to local shifts within the so-called extensor assembly of the finger, the anatomical structure where tendons of extrinsic and intrinsic finger muscles converge (Van Zwieten et al., 2002). The stability of the arch of the striking finger contributes to its rigidity, thus influencing the quality of percussion sounds produced.