Chest percussion, a common yet underutilized art

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Dear Editor

Long years of respiratory medicine practice lets one develop a clinical instinct which certainly aid in diagnostic acumen. A senior professor developed dry episodic cough with some retro-sternal discomfort. He had no fever, pain, dyspnoea or any other constitutional symptoms. Physically very active and an avid sportsman, he continued with patient care. He self-percussed his thorax to look for mediastinum shift, crepitus and liver dullness and found a hyper resonant note in right side of the chest in axillary and inframammary area. The physician promptly got a non-contrast CT Chest (Figure 1 A,B) which confirmed right sided pneumothorax with underlying ruptured bulla. Since it was the first episode with minimal symptoms, a detailed discussion with the surgeon was undertaken regarding the management. In view of evidence of a ruptured bulla, a Video assisted thoracoscopic surgery was considered the best option even though oxygen saturation and hemodynamic stability was remarkable. Two bullae were removed by wedge resection (Figure 1 C,D), complete parietal pleura was removed, and mechanical pleurodesis was done. Two intercostal drainage tubes (apical and basal) with negative suction were put and removed on day 5 post-operatively. The patient (doctor) was discharged with expanded lung and clinically asymptomatic.

The ancient art of percussion in respiratory system examination was first described by Auenbrugger in 1761 [1]. Laennec, in the late 17th century, further developed the percussion notes interpretation and correlated it with auscultation to differentiate emphysema, pleural effusion and pneumothorax [2]. However, even after three decades the art and science of percussion remains grossly underutilized [2]. The stethoscope, a quick Chest X-ray and advanced radiology like CT chest has been the main cause, but we as respiratory physicians must realise that we do not carry

![Figure 1. A) Non-contrast CT chest revealing right sided pneumothorax due to a ruptured bulla. B) A coronal view of the pneumothorax showing a ruptured and an intact bulla in the right lung. C) Wedge resection of the intact bulla. D) Wedge resection of the ruptured bulla marked by the pointer.](image-url)
our stethoscope in daily activities, but we can always percuss with our bare hands.

Self-percussion has scant mention in literature. It is rarely used in medical school to teach the art of percussion [3] and has a definite role as a part of rehabilitation in bronchiectasis [4,5]. This case highlights the importance of the ancient art of percussion. By teaching percussion and auscultation to the residents, the professor had perfected his clinical skills; thereby utilizing the clinical skill to make an early diagnosis. An early diagnosis allowed for a definitive procedure done within a day from the first symptom.

References