



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

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This article is distributed under the terms of the Creative Commons Attribution Noncommercial License (by-nc 4.0) which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited. 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.



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.

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