**USING BIOPSY IN THE DIAGNOSIS OF PULMONARY DISEASES**

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Asthma is a major health concern in all countries regardless of their level of economic development. According to the World Health Organization (WHO), there are currently 235 million people suffering from asthma worldwide. basic understanding of the disease progression, and eventually may lead to optimal clinical management. Non-invasive methods, such as the measurement of exhaled nitric oxide and tidal forced expirations as assessments of asthma pathology, have contributed hugely towards asthma research. However, non-invasive methods may not allow a definitive diagnosis to be made. Different phenotypes of asthma seem to exist. For example: 1) persistent symptoms without airway inflammation; 2) high dose steroid dependent eosinophilic inflammation; and 3) persistent eosinophilic inflammation even with high dose of oral prednisolone accompanied by airway wall remodelling.

In asthma airway research, biopsy samples are often taken from asthmatic participants with an existing co-morbidity, such as lung cancer. In these patients, one can obtain the asthmatic biopsy samples from the second-to-fourth generation of the main bronchus after lung resection surgery. Samples can also be acquired from the macroscopically healthy segments of the bronchus from patients with lung cancer (without asthma condition), which is non-tumorigenic, and such (non-asthmatic) control biopsy samples may be used for comparison.

Sometimes, after a biopsy may be a collapsed lung (pneumothorax). To check this, you need to make an X-ray of the lungs. Signs of lung collapse include:

- blue skin;

- chest pain;

- increased heart rate (pulse);

- shortness of breath;

A biopsy should not be performed if other tests show that you have:

- any blood clotting;

- emphysema;

- brush of lung;

- pulmonary hypertension;

- severe hypoxia (low oxygen content in the blood);

- heart failure.