How do tonsils and adenoids affect sleep?

The path that air takes from the nose through the throat down into the lungs is called the airway. The tonsils and adenoids form a ring of tissue in the back of the throat. If the tonsils and adenoids are large, they narrow the airway and reduce the flow of air into and out of the lungs.

Generally, even if the tonsils and adenoids are very large, they do not cause breathing difficulties while a child is awake- although they may cause lesser symptoms such as a continuous stuffy nose, "nasal" speech or a habit of keeping the mouth open. During sleep, however, the muscles of the throat relax. Air flowing through the narrowed space results in a drop in air pressure. The combination of relaxed muscles and low pressure causes collapse of the throat and the child will be unable to breathe (apnea). After a few seconds of struggling, the child is partially aroused from sleep (although he or she will not completely wake up), the muscle tone returns, and the throat opens- often with a gasp. A child may go through many of these cycles in an hour, resulting in a disturbance of the normal sleep patterns. This condition is known as Obstructive Sleep Apnea (OSA).