SUMMARY

Cough is one of the most common symptoms of acute and chronic respiratory disease children. Cough may be acute as occurs with acute respiratory tract infections as common cold and its complications, pneumonia, asthma and asthmatic bronchitis, measles and whooping cough and foreign body in the bronchus. Also, cough may be chronic or recurrent. Chronic or recurrent cough may occur in infancy due to the presence of congenital anomalies of airways as tracheoesophageal fistula or vascular ring, or due to infections either viral infections like respiratory syncytial virus and cytomegalovirus or bacterial as pertussis or chlamydia. The infant also may have cystic fibrosis and immotile cilia syndrome.

In preschool age;the child may have chronic or recurrent cough due to foreign body inhalation infection hyper reactivity as asthma, cystic fibrosis or passive smoking.

During school age to adolescence age the child may have either chronic or recurrent cough

due to reactive causes infection or as a result of an irritative cause as ciggarette smoking.

To reach the diagnosis of cough the history should be taken. According to age of the child the cough in infancy may be due to congenital anomalies, infections or due to cystic fibrosis.

While during preschool age;the cough may be due to foreign body in the respiratory tract , infections, cystic fibrosis, passive smoking or due to reactive causes.

During school age the cough may due to irritative causes,infections or due to reactive causes.

It is important to know the nature of cough which may be "howhing" , dry , brassy , croupy, paroxysmal or attension seeking cough. Also, the nature of sputum which may be mucoid, purulent or bloody.

Also, during taking the history the effect of time on the nature of cough should be known; whether the cough is nocturnal, early mornning or during sleep it disappear. Associated findings as

growth failure or shortness of breath should be known. The history of response to previous therapy as antibiotics, bronchodilators or antihistamines should be taken.

Also, seasonal effects on cough whether during winter months, spring or summer months should be noted. Also, exposure of the child to infection should be known. After taking history, physical examination should be done. During general examination the child must be examined whether he is of normal or undergrowth. Also, if associated diseases of the upper respiratory tract present, it will help the doctor to reach the diagnosis of the cause of cough. During head and neck examination one must search for any allergic signs as Dennie's sign or allergic gap of the nose and for "Cobblestoning" or hypertrophic lymphoid follicles on the posterior pharyngeal wall of allergic rhinitis or chronic sinusitis.

During examination of the chest, if there is an increase of the antroposterior diameter of the chest or hyperresonance on percussion thus indicating small airway obstruction and air trapping associated with generalized pulmonary disease. Also, chest

examination of shows localized inspiratory crepitations especially with a bubbling sound; the diagnosis will be bronchiectasis. During chest examination, we must look for fine inspiratory crepitations or using of acessory muscles of inspiration.

If cough is associated with digital clubbing the possibilities will be either suppurative lung disease or associated cardiac pathology.

Laboratory investigations and radiological investigation: An x-ray study of the chest will almost always by indicated in the evalution of the child with chronic cough. Also, complete blood picture is very important for diagnosis of the causes of chronic cough.

Examination of the sputum by staining may be helpeful in distinguishing infective from allergic bronchitis. Also, culturing of sputum is helful in isolation of respiratory viruses or bacteria. Other tests should be done as allergic skin testing to differentiate between asthma and recurrent viral bronchitis in young children.

Also, pulmonary function testing by spirometry can detect the presence or absence of airflow obstruction. Also, Bronchial provocation testing may be extremely helpful in identifying unrecognized asthma in older children. These tests are positive in 75-90% of asthmatic children, even in those who were tested during remission from their disease. Bronchoscopy and Bronchography: If "congenintal anomaly of the tracheobronchial tree is suspected; Bronchoscopy may be helpful in confirmation as well as to exclude the diagnosis of foreign body and to investigate for persistant collapse. Bronchography is rarely useful in the diagnosis of chronic cough in a child.

Other specific investigations as sweat electrolytes, Mantoux test, determination of immunoglobulins and α_1 antitrypsin levels, and serologic tests for Mycoplasma pneumoniae may be needed. A biopsy of the lung of an immunosuppressed child is particularly useful is ruling out opportunistic infection such as pneumocystis carnii.