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Prevention of Interstitial Lung Diseases in Children

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DESCRIPTION

Childhood interstitial lung disease is a collective name for a collection of uncommon lung illnesses that can affect infants, adolescents, and teenagers. Chronic cough, fast breathing, and shortness of breath are all indications of these disorders. These illnesses have comparable effects on the lungs. They harm the tissues that surround the alveoli and bronchial tubes in the lungs, for example (airways). These disorders can sometimes cause direct injury to the air sacs and airways. Children's lungs are in danger due to genetics, air pollution, cleaning solutions, smoking, and sleep difficulties. Some risk factors are inescapable, but with some basic understanding and preventative strategies, these dangers may be minimized. Lung cancer and long-lasting obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema, are both caused by cigarette smoking. Cigarette smoke can constrict the airways, making breathing harder. It produces persistent lung inflammation, or swelling, which can result in chronic bronchitis. Cigarette smoke damages lung tissue over time and may cause alterations that lead to cancer. It's never too late to quit smoking if children are a smoker. Childhood interstitial lung disease (often referred to as "Child") is a collection of uncommon lung diseases that affects infants, children, and teenagers. A child in any form damages a child's lungs, causing them to malfunction. The interstitium, a thin tissue between small air sacs and blood veins in the lungs, is affected by several kinds of children. Some types of children can affect other parts of the lungs. For example, they don't know how many children have children. Some children with youngsters are born with it, while others develop it later in life. Adults can develop interstitial lung disease, although the reasons and consequences are frequently different. Childhood interstitial lung disease, refers to a category of uncommon lung disorders that affect infants, adolescents.

Chronic cough, fast breathing, and shortness of breath are all indications of these disorders. These illnesses have comparable effects on the lungs. They harm the tissues that surround the alveoli and bronchial tubes in the lungs, for example (airways). These disorders can sometimes cause direct injury to the air sacs and airways. Lung function can be harmed, blood oxygen levels can be lowered, and the breathing process can be disrupted by numerous sorts of children [1-5].

Prevention of interstitial lung diseases

Although there is no method to prevent idiopathic or hereditary ILD, some of the forms with recognized causes can be avoided. Wearing a mask that filters particles from the air near toxic substances, such as asbestos, metal dust, or chemicals, can lower risk. Smoking cessation, Getting flu and pneumonia vaccines to help protect children's lungs.

Childhood interstitial lung disease is a wide term that refers to a collection of uncommon lung illnesses that can affect infants, adolescents, and teenagers. Specific age groups are more susceptible to certain illnesses. A child can occur for no apparent reason. Certain genes, poisons, or other disorders, on the other hand, might be to blame. The following are

Inherited conditions: Surfactant disorders, which affect a fluid in the lungs that helps child breathe, can be handed down the generations.

Immune system disorders: Certain immune system issues make it more difficult for children to fight infections.

Autoimmune diseases: These occur when child's immune system targets healthy tissues by mistake. Two autoimmune diseases that are typically associated with children include inflammatory bowel disease and collagen vascular disease.

Infection: Some children get children after catching a cold or contracting a virus.

Birth defects: Some babies are born with a birth defect that affects their lungs.

Aspiration: When inhale food, drink, or vomit into children's lungs, it can cause harm. Aspiration is common in children with swallowing difficulties or gastric reflux disorder (GERD).

Vaccinations and lung disease: People who have chronic lung illness, such as asthma or COPD, are more likely to become very ill from diseases that vaccinations prevent. Vaccinations are a crucial part of staying healthy for everyone. Vaccination offers the best protection against illnesses that can be prevented with vaccines.

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Vaccines are one of the most secure methods of illness prevention. Getting immunized, stopping smoking, and controlling adolescent chronic condition all contribute to child overall safety. The majority of vaccines side effects is minor and resolve on their own. Soreness, redness, and swelling at the injection site are examples. Following immunization, some persons may suffer a minor fever. Severe negative effects are quite uncommon. People with chronic respiratory illnesses including asthma, COPD, or cystic fibrosis are more susceptible to influenza and pneumococcal infection squeals. Every year, patients with certain lung illnesses and smokers should obtain the influenza vaccination. They should also get vaccinated against pneumonia [5-10].

Idiopathic interstitial pneumonias: Acute interstitial pneumonia, cryptogenic organizing pneumonia, desquamate interstitial pneumonia, nonspecific interstitial pneumonia, and lymphocytic interstitial pneumonia all fall within this group.

Other primarydis orders: Alveolar haemorrhage syndromes, hypersensitivity pneumonitis, aspirationsyndromes, eosinophilic pneumonia, bronchiolitis obliterans, pulmonary alveolar proteinosis, pulmonary infiltrates with eosinophilia, pulmonary lymphatic disorders (Lymphangiectasis, lymphangiomatosis), and pulmonary vascular disorders are some of the conditions that can occur (haemangiomatosis).

Disorders of the compromised immune system: Opportunistic infection, therapeutic intervention-related illnesses, lung and bone marrow transplant-associated lung diseases, and diffuse alveolar injury of the unknown source are all included in this category.

REFERENCES

- Pittman JE, Cutting G, Davis SD, Ferkol T, Boucher R. Cystic fibrosis: NHLBI workshop on the primary prevention of chronic lung diseases. Ann. Am. Thorac. 2014: 11(Supplement 3):S161-S168.
- Jackson DJ, Hartert TV, Martinez FD, Weiss ST, Fahy JV. Asthma: NHLBI workshop on the primary prevention of chronic lung diseases. Ann. Am. Thorac.2014: 11(Supplement 3):S139-S145.
- 3. Bouhuys A, Beck GJ, Schoenberg JB. Priorities in prevention of chronic lung diseases. Lung.1979: 156(1):129-148.
- Delestrain C, Flamein F, Jonard L, Couderc R, Guillot L, Fanen P. et al. Lung diseases in children associated with inherited disorders of surfactant metabolism. Rev Pneumol Clin.2013: 69(4):183-189.
- Wurzel DF, Mackay IM, Marchant JM, Wang CY, Yerkovich ST, Upham JW. et al. Adenovirus species C is associated with chronic suppurative lung diseases in children. Clin. Infect. Dis. 2014: 59(1): 34-40.
- La Grutta S, Indinnimeo L, di Coste A, Ferrante G, Landi M, Pelosi U. et al. Environmental risk factors and lung diseases in children: from guidelines to health effects. Early Hum. Dev. 2013: 89:S59-S62.
- Camargo Jr CA, Budinger GS, Escobar GJ, Hansel NN, Hanson CK, Huffnagle GB. et al. Promotion of lung health: NHLBI workshop on the primary prevention of chronic lung diseases. Ann. Am. Thorac. 2014: 11(Supplement 3):S125-S138.
- Stahl M, Graeber SY, Joachim C, Barth S, Ricklefs I, Diekmann G. et al. Three-center feasibility of lung clearance index in infants and preschool children with cystic fibrosis and other lung diseases. J. Cyst. Fibros. 2018: 17(2):249-255.
- Cohen SA, Kingma PS, Whitsett JA, Goldbart R, Traitel T, Kost J. SP-D loaded PLGA nanoparticles as drug delivery system for prevention and treatment of premature infant's lung diseases. Int. J. Pharm. 2020: 585:119387.
- de Benedictis FM, Bush A. Corticosteroids in respiratory diseases in children. Am. J. Respir. Crit. Care Med. AM J RESP CRIT CARE. 2012: 185(1):12-23.