1-SMOKING CESSATION AND AVOIDANCE OF ENVIRONMENTAL TOBACCO SMOKE

Cigarette smoking has multiple hurtful effects in individuals with established respiratory illness, additionally to its different well-known effects like risk of carcinoma, chronic clogging pulmonic illness (COPD) ,vessel disease; and with exposure in gestation, risk of respiratory illness and lower metastasis infections in kids.

In individuals with respiratory illness (children and adults), exposure to passive smoke will increase the chance of hospitalization and poor asthma management.

Active smoking is related to enlarged risk of poor respiratory illness management, hospital admissions and in

some studies, death from asthma as it increases the speed of decline of respiratory organ perform and will result in COPD; and it reduces the effectiveness of indrawn and oral corticosteroids.

When stop smoking , respiratory organ perform improves and airway inflammation decreases.

Reduction of passive smoke exposure improves respiratory illness management and reduces hospital

admissions in adults and youngsters.

Use of e-cigarettes is related to associate enlarged risk of respiratory illness symptoms or

diagnosis, associated an enlarged risk of respiratory illness exacerbations.

2-PHYSICAL ACTIVITY

For people with asthma, as in the general population, regular moderate physical activity has important health benefits including reduced cardiovascular risk and improved quality of life.

There is some evidence that aerobic exercise training can have a small beneficial effect on asthma symptom control and lung function, although not airway inflammation.

Improved cardiopulmonary fitness may reduce the risk of dyspnea unrelated to airflow limitation being mistakenly attributed to asthma.

In one study of non-obese patients with asthma, high intensity interval training together with a diet

with high protein and low glycemic index improved asthma symptom control, although no benefit on lung function was seen In young people with asthma.

swimming training is well tolerated and leads to increased lung function and cardio-pulmonary fitness.

Exercise is an important cause of asthma symptoms for many asthma patients, but EIB can usually be reduced with maintenance ICS .

Breakthrough exercise-related symptoms can be managed with warm-up before exercise, and/or

by taking SABA47 or low dose ICS-formoterol219 before or during exercise.

Advice :

• Encourage people with asthma to engage in regular physical activity because of its general health benefits.

• Provide patients with advice about prevention and management of exercise-induced bronchoconstriction including daily treatment with ICS plus SABA as-needed and pre-exercise , or with low dose

ICS-formoterol as-needed and before exercise with warm-up before exercise if needed

3-AVOIDANCE OF OCCUPATIONAL EXPOSURES

Occupational exposures to allergens or sensitizers account for a considerable proportion of the incidence of adult-onset asthma.

Once a patient has become hyposensitized to associate degree activity substance, the amount of exposure necessary to induce symptoms could also be very low, and ensuing exacerbations become progressively severe. tries to cut back activity exposure are prospering, particularly in industrial settings.

Cost-efficient decrease of latex sensitization will be achieved by exploitation non-powdered low-allergen gloves rather than pulverized latex gloves.

Advice:

• raise all patients with adult-onset bronchial asthma regarding their work history and alternative exposures .

• In management of activity bronchial asthma, establish and eliminate activity sensitizers as presently as attainable, and remove hyposensitized patients from now on exposure to those agents.

• Patients with suspected or confirmed activity bronchial asthma ought to be referred for knowledgeable assessment and recommendation.

4-AVOIDANCE OF MEDICATIONS THAT MAY MAKE ASTHMA WORSE

Aspirin and alternative NSAIDs will cause severe exacerbations.

Beta-blocker medication, together with topical ophthalmic preparations, could cause bronchospasm and are involved in some respiratory disease deaths.

However, beta-blockers have a verified profit within the management of disorder.

individuals with respiratory disease United Nations agency have had associate degree acute coronary event and received beta-blockers at intervals twenty four hours of hospital admission are found to possess to possess mortality rates than people who didn't receive beta-blockers.

Advice:

• perpetually raise individuals with respiratory disease regarding concomitant medications, together with eye drops

• perpetually raise regarding respiratory disease and former reactions before prescribing NSAIDs, and advise patients to prevent victimization these medications if respiratory disease worsens.

• Empirin and NSAIDs don't seem to be typically contraindicated in respiratory disease unless there's a history of previous reactions to these agents .See 'Aspirin-exacerbated metastasis disease.

• For individuals with respiratory disease United Nations agency could take pleasure in oral or ophthalmic beta-blocker treatment, a call to inflict these medications ought to be created on a item-by-item basis, and treatment ought to solely be initiated underneath shut medical superintendence by a specialist.

• respiratory disease mustn't be thought to be associate degree absolute reason to use cardio selective beta-blockers after they square measure indicated for acute coronary events, however the relative risks and edges ought to be thought-about .

5-AVOIDANCE OF INDOOR ALLERGENS

Because several respiratory disease patients react to multiple factors that area unit present within the surroundings, avoiding these factors completely is typically impractical and really heavy for the patient.

Medications to take care of sensible respiratory disease management have a very important role as a result of patients area unit usually less tormented by environmental factors once their respiratory disease is well controlled.

There is conflicting proof regarding whether or not measures to scale back exposure to indoor allergens area unit effective at reducing asthma symptoms.

The bulk of single interventions did not reach a sufficient reduction in substance load to lead to clinical improvement.

It's doubtless that no single intervention can reach sufficient advantages to be price effective .

One study of insecticidal bait in homes eradicated cockroaches for a year and diode to a significant decrease in symptoms, improvement in pneumonic operate, and fewer health care use for youngsters with

moderate to severe respiratory disease.

6-WEIGHT REDUCTION

Include weight reduction in the treatment plan for obese patients with asthma.

• For obese adults with asthma a weight reduction program plus twice-weekly aerobic and strength

exercises is more effective for symptom control than weight reduction alone.

7-HEALTHY DIET

Encourage patients with asthma to consume a diet high in fruit and vegetables for its general health benefits.

8-BREATHING EXERCISES

A systematic review of studies of breathing and/or relaxation exercises in adults with asthma and/or dysfunctional breathing, including the Buteyko method and the Papworth method, reported improvements in symptoms, quality of life and/or psychological measures, but with no consistent effect on lung function and no reduction in risk of exacerbations.

In order for studies of non-pharmacological strategies such as breathing exercises to be considered high quality, control groups should be appropriately matched for level of contact with health professionals and for asthma education.

A study of two physiologically contrasting breathing exercises, which were matched for contact with health professionals and instructions about rescue inhaler use, showed similar improvements in reliever use and ICS dose after down-titration in both groups.

This suggests that perceived improvement with breathing exercises may be largely due to factors such as relaxation, voluntary reduction in use of rescue medication, or engagement of the patient in their care.

The cost of some commercial programs may be a potential limitation.

9-AVOIDANCE OF INDOOR AIR POLLUTION

In addition to passive and active smoking, other major indoor air pollutants that are known to impact on respiratory health include nitric oxide, nitrogen oxides, carbon monoxide, carbon dioxide, sulfur dioxide, formaldehyde, and biologicals (endotoxin).

Sources include cooking and heating devices, particularly if they are not externally fluid (vented).

Installation of non-polluting, more effective heating (heat pump, wood pellet burner, fluid gas) in the homes of children with asthma does not significantly improve lung function but significantly reduces symptoms of asthma, days off school, healthcare utilization, and pharmacist visits.

Air filters can reduce fine particle exposure, but there is no consistent effect on asthma outcomes.

Advice:

• Encourage people with asthma to use non-polluting heating and cooking sources, and for sources of pollutants to be vented outdoors where possible .

10-STRATEGIES FOR DEALING WITH EMOTIONAL STRESS

Emotional stress may lead to asthma exacerbations in children and adults. Hyperventilation associated with laughing, crying, anger, or fear can cause airway narrowing (Panic attacks have a similar effect).

However, it is important to note that asthma is not primarily a psychosomatic disorder.

During stressful times, medication adherence may also decrease.

Advice:

• Encourage patients to identify goals and strategies to deal with emotional stress if it makes their asthma worse .

• There is insufficient evidence to support one strategy over another, but relaxation strategies and breathing exercises may be helpful in reducing asthma symptoms.

• Arrange a mental health assessment for patients with symptoms of anxiety or depression.

11-AVOIDANCE OF OUTDOOR ALLERGENS

For patients sensitized to outdoor allergens such as pollens and molds, these are impossible to avoid completely.

Advice:

• For sensitized patients, closing windows and doors, remaining indoors when pollen and mold counts are highest, and using air conditioning may reduce exposure.

• The impact of providing information in the media about outdoor allergen levels is difficult to assess.

12-AVOIDANCE OF OUTDOOR AIR POLLUTION

Meta-analysis of epidemiological studies showed a significant association between air pollutants such as ozone, nitrogen oxides, acidic aerosols, and particulate matter and symptoms or exacerbations of asthma, including emergency department visits and hospitalizations.

Proximity to main roads at home and school is associated with greater asthma morbidity.

Certain weather and atmospheric conditions like thunderstorms may trigger asthma exacerbations by

a variety of mechanisms, including dust and pollution, by increasing the level of respirable allergens, and causing changes in temperature and/or humidity. Reduction of outdoor air pollutants usually requires national or local policy

13-AVOIDANCE OF FOOD AND FOOD CHEMICAL

Food allergy as an exacerbating factor for asthma is uncommon and occurs primarily in young children. Confirmed food allergy is a risk factor for asthma-related mortality.

Food chemicals, either naturally occurring or added during processing, may also trigger asthma symptoms especially when asthma is poorly controlled.

Sulfites (common food and drug preservatives found in such foods as processed potatoes, shrimp, dried fruits, beer, and wine) have often been implicated in causing severe asthma exacerbations.

However, the likelihood of a reaction is dependent on the nature of the food, the level and form of residual sulfite, the sensitivity of the patient, and the mechanism of the sulfite-induced reaction.

There is little evidence to support any general role for other dietary substances including benzoate, the yellow dye, tartrazine, and monosodium glutamate in worsening asthma.

Advice:

• Ask people with asthma about symptoms associated with any specific foods

• Food avoidance should not be recommended unless an allergy or food chemical sensitivity has been clearly demonstrated , usually by carefully supervised oral challenges.

• If food allergy is confirmed, food allergen avoidance can reduce asthma exacerbations

• If food chemical sensitivity is confirmed, complete avoidance is not usually necessary, and sensitivity often decreases when overall asthma control improves .