

## **Optimal Care for Asthmatic Children—Do We Need Special Clinics?**

Historically asthma care was reactive, responding to patient need as clinical demand rose. Subsequently, medical input was focused on managing acute exacerbations and severe asthma in secondary care.

The following statistics over past 30 years have changed the management: increased incidence(1,2), rising mortality(3), substantial morbidity(4), under and delayed diagnosis(5) and sub optimal treatment(6,7). This combined with guidelines(8,9) and significant primary care based research in developed countries like UK, USA, Europe has led us to consider specific and focused primary care in general pediatrician's clinic for childhood bronchial asthma in our country.

There can be two types of care: primary care in general pediatricians clinic (supported by practicing pediatricians with interest in asthma, with or without trained nurses/ attendant) and secondary care (pediatric chest physicians with a lung laboratory). There should be good communication and referral between the two and a concept of shared care between them is most needed(10).

Before considering the effective delivery device for asthma care in our setting it is wise to emphasize the problems in routine diagnosis and management of childhood bronchial asthma in primary care settings.

### **Diagnostic Dilemmas: Primary Care Physician's Point of View**

First of all, the diagnosis of childhood bronchial asthma is still not acceptable to many pediatricians. The terms 'wheezy bronchitis', 'asthmatic bronchitis', 'allergic bronchitis, *etc.*' are still used which mystify the diagnosis. Some may fear loss of clients as the diagnosis of 'asthma' is still a social taboo in most parts of our country. The blame should not go to the general pediatricians as asthma is a complex disease with variable presentations and has so many differential diagnoses to exclude. The comorbid states like posterior nasal drip, allergic rhinitis, gastroesophageal reflux and atopic states often confuse them in making a correct diagnosis. Little time is available in primary care physicians outpatient clinics (OPC) to take elaborate medical, social, familial, environmental and emotional history of the patient and parents. Moreover, poor records in most of the cases make the diagnosis very difficult. It may also reflect dissatisfaction with the communication aspects of traditional health care: 'My doctor has not got the time/My child gets back the symptoms again as soon as the medicine is stopped' *etc.*(11).

Parents and relatives of the child also face multiple communication problems, which hinders acceptance of the diagnosis and delays treatment. Parents reluctance to accept an asthma diagnosis to their children is common but variable and they can be classified in the following groups:

- (a) *Acceptors*: Simply accept this with a hope that it will be cured soon ( mostly have asthma in families).
- (b) *Pragmatists*: Have difficulty reconciling asthma with their beliefs, but agree at least temporarily that their children have it and continue prophylactic therapy (those with

repeated acute attacks in their children).

- (c) *Deniers*: Claim not to have asthma and refuse medications (mostly with less acute attacks and other doctor's opinion against this diagnosis and ironically these children may be taking recurrent oral steroids as rescue medicines without grudge).
- (d) *Distancers*: They find relief treatment acceptable but not regular preventive treatment as this symbolizes 'proper asthma'.
- (e) *Choosers*: Accept every thing and ready to take medications but nothing by inhalation devices, as this is considered as social taboo(11).

The main obstacles in convincing the parents is lack of time and a uniform guideline regarding diagnosis and management of asthma available to the primary care physicians. A well informed asthma clinic may help in giving time and correct information to the parents and restrain them from shopping from one clinic to the other.

#### **Management Dilemmas: Doctor's Point of View**

- (1) In the first visit parents need time and not prescription. This can be better accomplished in an asthma clinic. Informing the parent that the disease is variable, unpredictable and reversible and there is no magic cure is most important. But many a time, physicians are hesitant to state this fact.
- (2) It is very difficult to convince the parents that inhaler devices are best and not expensive, the last resort, habit forming or addictive. This needs sympathetic time consuming attitude to the parents which can be best achieved in an asthma clinic.
- (3) There is considerable confusion regarding knowledge, attitude and practice of the NIH

(National Institute of health) (1997) and GINA (Global Initiative against Asthma) (2002) guidelines and strict adherence to them amongst the doctors.

- (4) While dealing with poor asthma control, one must consider medication related factors (drug / device / delivery) and patient related factors carefully with time. The best guideline is to request the parents to demonstrate the devices in each visit, which can be better executed in asthma clinic.
- (5) A child may have severe disease with good control by regular medications and trigger avoidance while another may have mild disease with poor control resulting in regular emergency visits. Hence one should remember that more acute attacks do not always mean severe disease but could as well be due to poor control or therapy(12).
- (6) Many a times the parents self medicate their children with bronchodilators, steroids, antibiotics as in the last prescription in each relapse attack to save time and money. It makes the job more difficult for the physicians.
- (7) There is very scanty referral service available as regards pediatric pulmonologists and pulmonary labs (secondary care).

#### **Management dilemmas: Parent's Point of View**

- (1) First they are hesitant regarding inhaler use considering it expensive, addictive and the final resort in asthma therapy. Secondly, there is appreciable confusion regarding skill of administration specially in infants and toddlers. Thirdly, they may argue the rationale to use steroid inhalers continuously for months together when there are infrequent symptoms. Finally, they may be diverted to the homeopathic /

alternative / magic cure advertisements for a trial notwithstanding the long term therapy they were supposed to be adhered to.

- (2) A sizable portion of the parents believe that asthma is a form of allergy and specific allergy testing, avoidance and immunosensitization (desensitization with injectable allergens) can cure asthma. They also try to adhere their wards to strict food, exercise and climatic restrictions in fear of asthma attacks.

All these queries can be better addressed to in an asthma clinic by a team of doctors, nurses and attendants (including medical service representatives) in repeated visits in a sympathetic manner.

### Functions of Asthma Clinic

Give time and sympathy to the parents first. The doctors and his team should ensure that a correct diagnosis is made. This will need a good history (listening and understanding the parent's concern, the present, past, familial, environmental, social problems of their child), detailed and meticulous scrutinizing the past prescriptions (use of bronchodilators, steroids, antibiotics, their frequency, duration of use and seasonal records of symptoms *etc.*). Teaching the parents the importance of keeping every single record is the most important advice. Clinical examination of both upper and lower respiratory system (*e.g.*, allergic rhinitis, atopy, sinusitis, ear infections other than routine examinations) and of other relevant systems (gastro-esophageal reflux, cardio-vascular anomalies, blood pressure, *etc.*) are next important steps. Routine investigations *e.g.*, complete blood count, radiology (chest/sinuses *etc.*), Mantoux test and other relevant investigations may be done only to exclude other diseases. Serum specific immunoglobulin E allergy test spirometry are rarely needed and

only in difficult cases. Use of peak flowmetry, if needed, may be demonstrated to the parents in a friendly manner.

Staging and grading their child's asthma with due explanation is the next step. One should actually demonstrate the inhaler devices with the child and the parents in every visit. Educating that one visit and prescription will not do magic cure should be the principal communication. The need for regular follow up is emphasized to search out the loopholes in non-responders and attempt to convince the deniers. Home management plans are handed out only after a few and reliable visits (in routine and emergency).

Explaining the details of environmental control, promoting the exercises advocated, demystifying the acute care guidelines should also be considered. Meticulous care must be taken to identify failure of therapy, *i.e.*, triggering factors, wrong drug, dose or frequency, faulty delivery technique, manipulating abnormal peak expiratory flow meter readings.

Keeping register for audit, research, review and ready references is a must in these clinics. Provision of related literatures, handouts, skills for using devices with photographs, facts showing asthmatic sportsmen and celebrities who have reached heights (enthusing the spirit in the children) and above all depicting, analyzing and scientifically exposing the false claims published in print media showing miraculous cure in asthma should be the responsibility of these clinics.

Absorbing such information can be overwhelming in a 15-minute appointment, but other health care team members can help reinforce the educational message. Education is an ongoing process, and information needs to be adjusted appropriately for the child as he or she

### Key Messages

- Delivery of optimal care of asthmatic children need trained primary care physicians who have time to respond to all the queries and anxieties of the parents and demistify the popular misbeliefs about asthma in children.
- A specialised asthma clinic in the primary care setting is the best option which can satisfy all these requirements.

ages and for the family as they become more educated(13). Hence, it is easy to understand why a specialized ASTHMA CLINIC is more useful than routine clinic in primary care management.

#### Should Asthma Clinic be run by a Doctor or a Nurse ?

Answer to this question is probably both. Nurse run asthma clinic in general practice was first described by Great Barnes in 1985. 90% of the general practice in UK offered supervision of asthma under asthma clinic(14). In a pediatric study by Madge, *et al.*(15) the outcome of a specialized nurse led asthma clinic fared better than a hospital based specialized care in admitted children. But this is still a dream to be fulfilled in our country.

Parents like health professionals who are warm and sympathetic, easy to talk to and appear self confident, listen patiently and respond logically, ask easy open ended questions and above all do not repeat themselves(14). Nurses or assistants in close collaboration with doctors are able to use their skills comprehensively, effectively and efficiently(15). It is not who delivers the care that is important, it is the quality of care that counts(14). At this juncture the role of medical service representatives who can demonstrate the devices correctly should be kept in mind. The role of a video/ video CD demonstration can be marvelous.

#### How to set up a Childhood Asthma Clinic in

#### Primary Care Setting?

It needs only the office clinic, preferably a computer (for record keeping, video show of device usage, utilizing an office spirometry, if available and information storage from the net), a peakflow meter and the most important of all, available time (minimum 15-30 min during the first visit and 10-15 min in the successive ones) and dedication. The first experience may not be that soothing, as people may try to avoid the clinic on suspicion of over-diagnosis, but one will establish the relevance of such a clinic with perseverance and dedication at the end. This setup is not that expensive and may return rich dividends in goodwill and revenue at the end.

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