STANDARD TREATMENT WORKFLOW (STW)

Asthma

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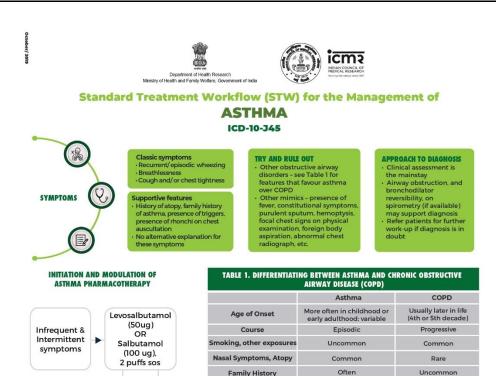
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Standard Treatment Workflow (STW) for the Management of

ASTHMA

ICD-10-J45



Classic symptoms Recurrent/episodic wheezing Breathlessness

- Breathlessness Cough and/or chest tightness
- Supportive features
 History of atopy, family history
 of asthma, presence of triggers
 presence of rhonchi on chest
 auscultation
- No alternative explanation for these symptoms

- TRY AND RULE OUT

 Other obstructive airway disorders see Table 1 for features that favour asthma over COPD

 Other primites presence of
- Other mimics presence of fever, constitutional symptor purulent sputum, hemoptysis, focal chest signs on physical examination, foreign body aspiration, abnormal chest

APPROACH TO DIAGNOSIS

- Clinical assessment is the mainstay Airway obstruction, and bronchodilator
- reversibility, on spirometry (if available) may support diagnosis Refer patients for further
- work-up if diagnosis is in doubt

INITIATION AND MODULATION OF ASTHMA PHARMACOTHERAPY

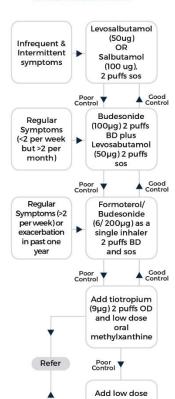


TABLE 1. DIFFERENTIATING BETWEEN ASTHMA AND CHRONIC OBSTRUCTIVE AIRWAY DISEASE (COPD)

	Astillia	COFD
Age of Onset	More often in childhood or early adulthood; variable	Usually later in life (4th or 5th decade)
Course	Episodic	Progressive
Smoking, other exposures	Uncommon	Common
Nasal Symptoms, Atopy	Common	Rare
Family History	Often	Uncommon
Triggers	Often Identified	None
Wheeze	Prominent and almost	May or may not be

TABLE 2. LEVEL OF CURRENT ASTHMA CONTROL (OVER THE

Components	Inadequately controlled (any one)	Adequately controlled (all should be present)
Daytime symptoms or use of rescue medication	More than twice a week	Twice or less in a week
Night-time symptoms/ awakening	Any	None
Limitation of activities	Any	None
Pulmonary function (if available)	FEVI <80% of predicted or PEF <80% of personal best	FEVI >80% of predicted or PEF >80% of personal best

FEVI Forced Expiratory Volume in first second, PEF Peak Expiratory Flow

GUIDING PRINCIPLES

- Mainstay of pharmacotherapy: Inhaled drugs
 Frequency of symptoms determine treatment initiation (see figure 1 for details)
 Reassess at 3-4 weeks good response: in favour of asthma diagnosis
 Patient education for compliance, warning signs, triggers, inhaler technique, PEF

- Patient education for compliance, warning signs, triggers, inhaler technique, PEF monitoring
 Inhaler technique to be monitored
 Follow-up at 4-12 weeks, assess diseases control by clinical parameters (see Table 2)
- 2)
 Step-up or step-down treatment as per level of asthma control (see figure 1)
 Follow up three-monthly and modulate treatment as needed
 Refer for further evaluation and management if asthma remains poorly controlled

DISEASE EXACERBATION

oral corticosteroids

- WHEN TO SUSPECT EXACERBATION

 Suspect if acute symptomatic worsening, or reduction in PEF to below 80% of personal best, while on continued treatment

 Take two additional puffs of the inhaler used if symptoms persist, and repeat if needed

 If no response after 24 hours, or symptomatic worsening, or further reduction in PEF, contact physician

 Physician to assess severity of exacerbation and manage accordingly.

accordingly LIFE-THREATENING EXACERBATION Altered sensorium, orthopnea, cyanosis, paradoxical breathing, hypotension, and/ or bradycardia (heart rate -60 bpm) - immediately refer to higher centre with ICU facility

- SEVERE ACUTE ASTHMA (PATIENT TO BE ADMITTED)
 Inability to complete sentences, agitation, use of accessory muscles, respiratory rate >30/min, heart rate >110/min, pulsus paradoxus >25 mm Hg, silent chest, and/or room air sPo2 <92%

- Oxygen supplementation to maintain sp02.92-95%
 Nebulized levosalbutamol/ipratropium (1.25 mg/ 0.5 mg) three doses at 20-minute interval, then 4-6 hourly or as needed Injection hydrocortisone 200 mg intravenously, then oral prednisolone 0.5 mg/ kg daily for five days
 Refer if no improvement
 Dischargeonly when symptoms improve, wheezing absent or significantly reduced, hear rate 4:00 bpm, respiratory rate 4:30/ min, room air sP02 >94%
 Schedule follow-up outpatient visit at one week

NON-SEVERE ACUTE ASTHMA

- If none of the above features present manage on outpatient basis

 Continue additional inhaler doses as needed

 Oral prednisolone 0.5 mg/ kg daily for five days

 Schedule follow-up outpatient visit at one week

★ KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES

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