

Insomnia



Nausea and vomiting



Insomnia

- Poor sleep in terms of quality and duration
- Sleep requirement: 7-8 hr/day
- Elderly: 6hr/day.
- **Classification:**
 - ☐ Transient(few days)
 - ☐ Short term insomnia (up to 3 weeks)
 - ☐ Chronic insomnia (> 3 weeks)..... referral

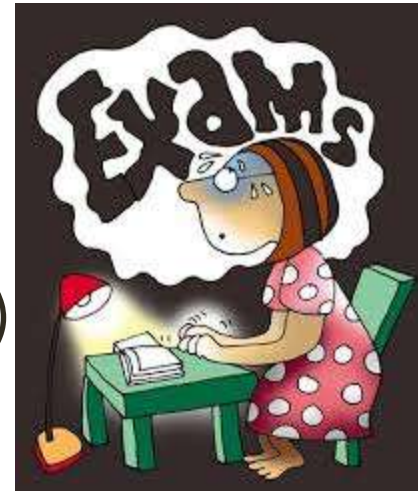
Prevalence

- 20-40% of people.
- 5-10 go to chronic insomnia (elderly)
- Insomnia increases in pregnant women due to biological causes.

Aetiology

- **Transient insomnia:** change in routine (eg. Noise, sleeping in a new environment (hotel), travelling to another place.
- **Short term insomnia:** emotional stress (eg. Exam, serious medical illness)

- **Chronic insomnia:**
psychiatric disorders (anxiety, depression)
Asking about what you are thinking
about before sleep helps to know the
cause of insomnia



Conditions to eliminate (refer)

- Insomnia in children (bed wetting, fear of dark)
- Medicine induced.
- Medical conditions:

Pain: angina, arthritis....etc

Breathing difficulty: HF, asthma, COPD.

Hyperthyroidism, parkinsonism.

- Depression: (early morning awaking) such patients will self-medicate themselves.



Table 4.7

Medication that can cause insomnia

Stimulants	Caffeine, theophylline, sympathomimetic amines (e.g. pseudoephedrine), MAOIs (especially in early treatment)
Anti-epileptics	Carbamazepine, phenytoin
Alcohol	Low to moderate amounts can promote sleep but when taken in excess or over long periods of time can disturb sleep
Beta-blockers	Can cause nightmares, especially propranolol. Limit by swapping to a beta-blocker that does not readily cross the blood-brain barrier
SSRIs	Especially fluoxetine
Diuretics	Ensure doses are not taken after midday to stop the need to urinate at night
Griseofulvin	

MAOI, monoamine oxidase inhibitor; SSRI, selective serotonin reuptake inhibitors

Management



Non pharmacological:

Normal sleep hygiene.

Avoid coffee,....etc before bed time

Avoid day time naps.

Pharmacological treatment

- Diphenhydramine 50mg, promethazine 20-40mg

Are antihistamines with anticholinergic properties, > 16 years, OK for pregnant

With sedative drugs (alcohol, opioid, hypnotic) increase sedation.

With TCADs (imipramine, amitriptyline) increase sedation and anticholinergic side effect (dry mouth, constipation, urinary retention)

CI: glaucoma, prostate enlargement.

Tolerance can occur THO should not be used for >7-10 consecutive nights.

Benzodiazepines (not an OTC) dependence and withdrawal



- Many people with insomnia use diazepam or other drugs from this group, and are a victim of dependence.
- Withdrawal should be gradual since abrupt withdrawal may cause confusion, psychosis, convulsion, insomnia. This may develop until up to 3 weeks of stopping long acting benzodiazepine (nitrazepam, diazepam), but may occur within hours in case of short acting (temazepam).

Steps of withdrawal

- Reduce the dose by 25% every 5 to 7 days until reaching half the original dose and then decreasing by 10% per week until discontinued..
- Withdrawal phenomenon is more common with the short acting than the long acting.
- Some drugs like propranolol can be used for treating the withdrawal.
- Sedative and hypnotics should be avoided.

Nausea and vomiting

- Is an unpleasant sensation and the precursor to the forceful expulsion of gastric content (vomiting)



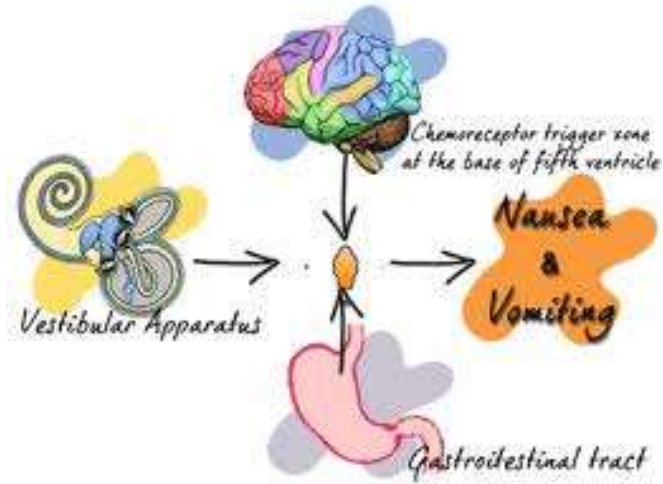
Aetiology

- Activation of the vomiting center in the medulla oblongata by:

a) Information received from the receptor cells in the wall of the GIT.

b) Information received from the chemoreceptor trigger zone which is sensitive to circulating chemicals (eg. sub,. Released by damaged cells as a result of bacterial inf.)

c) Information received from the eye, GIT, vestibular system in the ear (motion sickness)



Causes

- Gastroenteritis is the commonest associated with diarrhea, fever, in children it is mainly viral (rotavirus).
- Motion sickness: nausea, pallor, abdominal discomfort and occasionally vomiting associated with any form of travel (air, sea, road).



Prevalence of motion sickness

- Children 2-12 years, decreases with age, women > men.

Prophylaxis:

Once vomiting occurs little can be done, THO prophylaxis is necessary by the use of :

- Antihistamines.
- Anticholinergics.

Antihistamines for motion sickness

- Cyclizine, cinnarazine, meclizine, promethazine.
- Cyclizine(50mg): rarely used (abuse of the drug by misusers).
- Cinnarazine (15mg) stugeron before travel then tid.
- Meclizine taken every 24hr



Anticholinergic for motion sickness

- Hyoscine (most effective)
- Either orally or transdermally, it has short duration of action.
- **Note:** for long journeys meclizine and promethazine.
- Cyclizine, cinnarazine, promethazine > 5 years.
- meclizine > 2 years.
- hyoscine > 3 years.

Conditions to eliminate

- NV with headache.
- NV neonates (up to 1 month) congenital abnormality.
- NV infants (1month – 1 year): GI, UT inf. With fever.

It should be differentiated from regurgitation.

- NV in children 1-12 years gastroenteritis, otitis media
- Pregnancy: 1st trimester.
- Excess alcohol: vomiting will occur in the morning.
- Otitis media :
- Anxiety.
- CV diseases.
- Severe pain.
- Medicin induced

Medication induced NV

- Opioid., NSAID.
- Cytotoxic.
- Antibiotics (doxycyclin).
- Potassium supplement.
- SSRIs.
- Nicotine gum.
- Estrogen high dose.
- Theophylline and digoxin toxicity.

Treatment

- Domperidone (motilium 10): is a dopamine antagonist used after meals for postprandial NV associated with overeating.

>16 years, avoid in pregnancy.

SE: galactorrhea, rarely gynecomastia.

- Prochlorperazine: >18 years, used safely in pregnancy and breast feeding.

SE drowsiness which increases with the use of other sedative drugs

Cases:

- A 25-year old woman who is 12 weeks pregnant present to hospital with nausea and vomiting which has not responded to home therapy, the cause of nausea in this patient is increased level of:
 - FSH.
 - LH.
 - Estrogen.
 - Progesterone.
 - Human chorionic gonadotrophin (hCG).

- **A mother is asking for a prophylactic drug for motion sickness for her 2 children, they are going to have an air travel from Baghdad to Kuala Lumpur (Malaysia), as a community pharmacist drugs to be given for those children (3, 10) years old, respectively, are:**
 - Hyoscine, meclizine.
 - Cinnarazine 15 mg for both children.
 - Meclizine, promethazine.
 - Promethazine, hyoscine.
 - Promethazine, Meclizine.

- **Mrs. Luma, a previously well 30-year old lady, has been treated with temazepam 20 mg for anxiety which has been caused by her son who has a chronic disease. After taking it for 18 months, she was feeling well and decided that she no longer need the drug, and stopped taking it, within hours of stopping it her anxiety returned with insomnia, agitation and irritability. Which is the correct action:**
- Re- use Temazepam 10 mg every other day.
- Use a sedative drug to control agitation and irritability.
- Temazepam 15mg/day for 1 weeks then 10 mg for 1weeks then 9mg for 1 week.
- Temazepam 2mg every fortnight.
- Temazepam 5mg/day for 1 weeks then 0.5 mg every 1 week 0.05mg for 1 week.

**Are You a
Healthy
Sleeper?**



Thank you for listening