Treatment of anxiety disorders	
A- Stress anxiety disorder:	1- treated by BDZs: for short- term relief; resolve < 1 month. 2- Beta blockers can be used
B- Social anxiety and situational anxiety disorder	1- Beta-adrenergic blockers e.g. propranolol 2- Long term benefit from SSRIs
C-Panic attacks	1- BDZs (alprazolam) for short-term relief 2- **SSRIs** antidepressants e.g. paroxeti or **TCAs** e.g. clomipramine for long-term control
D- Phobias	1-Phobias are treated by Behavioral therapy 2- drugs like Alprazolam (acute), or SSRIs (long-term).
E-Generalized anxiety disorder	1-BDZs: for acute symptoms or for chronic use. 2- Buspirone : for chronic control esp. in elderly. 3- Antidepressants esp. SSRIs are also helpful
F- Obsessive-compulsive disorder (OCD)	1- Psychotherapy 2-Antidepressants e.g Clomipramine or SSRIs. 3- **BDZs are not helpful in OCD**
G- Post-traumatic stress disorder (PTSD):	1- BDZs: should be used early to promote sleep and minimize mental re-experience of the stress trauma which can lead to its persistence. May be used long- term for 6 2- SSRIs: paroxetine for long term control . 3- Other antidepressants TCAs may also be used.

Miscellaneous sedative hypnotics						
	1- Chloral hydrate	2.Chlormethiazole	Alpha 2-Adrenoreceptor Agonists		ß-Adrenoreceptor Antagonists	5- Antihistaminic drugs
			1- clonidine	2- 2- Dexmedetomidin		
Note	1- it is metabolized in liver to active metabolite Trichloroethanol (which is also a microsomal hepatic enzyme inducer). 2- It displaces warfarin from plasma protein binding sites.	1- It is a thiamine analogue. 2- It enhances GABA actions.			e.g., Propranolol)	H1-blockers as diphenhydramine
Use	1-Little used now as hypnotic.	1- It may be used as hypnotic in elderly. 2- It may also be used IV for status epilepticu	1- Antihypertensive 2- Has been used for the treatment of panic attacks. 3- Has been useful in suppressing anxiety during the management of withdrawal from nicotine and opioid analgesics	1- It is used for sedation in mechanically ventilated adults 2- it may reduce time needed for extubating patients 3- reduce the time of ICU stay.	Used to treat some forms of anxiety, particularly when physical (autonomic) symptoms (sweating, tremor, tachycardia) are severe.	1- can be used as sleep aids for children with insomnia.
•Adverse effects	1- It is a gastric irritant		Withdrawal from clonidine, after long use, may lead to a life-threatening hypertensive crisis.		1- lethargy, 2- vivid dreams 3- hallucinations 4- bronchospasm, 5- bradycardia 6- hypoglycemia with insulin 7- hyperlipidemia.	

Barbiturates	
Pharmacokinetics	1-They are weak acidic drugs, absorbed orally. 2- redistribute in the body 3- metabolized in the liver 4- induce P450 microsomal enzymes 5- inactive metabolites are excreted in the urine. 6- Alkalinization of urine helps their excretion (IV sodium bicarbonate is used for management of acute barbiturate toxicity) 7- readily cross the placenta and can depress the respiratory center of the fetus.
Therapeutic uses	***1- Anesthesia :(***The ultra-short acting barbiturates, such as thiopental, are used intravenously to induce general anesthesia.) ***2- Treating anxiety and insomnia (BZD are preferred now):*** a- used as mild sedatives to relieve anxiety, nervous tension, and insomnia (amobarbital). b- Barbiturates suppress REM sleep significantly. ***3- Anticonvulsant: (phenobarbital, mephobarbital):*** a- Phenobarbital is used in long-term management of tonic- clonic seizures, status epilepticus, and eclampsia. b- Primidone is also used for seizure disorders and tremors. c- The anticonvulsant doses are less than hypnotic doses and doses used for anaesthesia. ***4- Treatment of young children with recurrent febrile seizures:*** a- phenobarbital can depress cognitiveperformance in children b-drug should be used cautiously. ***5- Treatment of neonatal jaundice:(***Stimulation of microsomal hepatic enzymes by phenobarbital can accelerate bilirubin metabolism. ***6- Methohexital*** a-is used for procedural sedation of short duration b-e.g. cardioversion and pediatric outpatient surgery, fracture reduction for elective intubation). ***7- Butalbital:***(is used for the treatment of headache disorders.)
Adverse effects of barbiturates	***1- Dose dependent CNS depression***:(Barbiturates cause drowsiness, vertigo, impaired concentration, etc.) ***2-Drug hangover:*** (Hypnotic doses of barbiturates produce a feeling of tiredness well after the patient wakes.) ***3- In toxic doses*** (respiratory depresion, Cardiovascular colapse, and coma. Death occurs due to respiratory failure) ***4- induce the P450 system*** (affect metabolism of many drugs (drug-drug interactions)). ***5- increase porphrin synthesis*** (C.I : in patients with prophyria) ***6- behaviour change in children*** ***7- tolerance , dependence, addication*** (more than BZD) ***8- Abrupt withdrawal*** (anxiety, restlessness, delirium, seizures, weakness, vomting , cardiac arrest)

	Buspirone	Melatonin and Ramelteon	Orexin receptor antagonists
	1-It selectively binds to SHTIA (serotonin) receptor acting as a partial agonist. 2- It has no relation to BZD receptor or GABA inhibitory neurotransmitter. 3- Ipsapirone: a- one is a selective 5-HTIA receptor partial agonist. b- It has both antidepressant and anxiolytic effects	1- Both melatonin and Ramelteon are agonists at MT 1 and MT 2 melatonin receptors located in the brain. 2- The drug has no direct effects on GABAergic neurotransmission in the CNS (Little CNS depresion). 3- Ramelteon (Synthetic tricyclic analog of melatonin)	1- orexin receptor antagonists), which include Almorexant and suvorexant.
	1- Its anxiolytic effect does not appear before 2-4 weeks of its administration. 2- it is highly bound to plasma protein 3- metabolized in the liver by CYP 3A4 4- Tolerance to its effect does not occur, little potential to abuse and no withdrawal symptoms develop after abrupt withdrawal.	1-Melatonin is used orally or sublingual 2- It is safe for children. 3- It has no rebound insomnia or significant withdrawal symptoms. 4- Ramelteon has minimal potential for abuse, and regular use does not result in dependence	1- Orexin A and B are peptides that are involved in the control of wakefulness and that are silent during sleep. 2- Orexin levels increase in the day and decrease at night. 3- Loss of orexin neurons is associated with narcolepsy (daytime sleepiness). 4- Animal studies show that orexin receptor antagonists have sleep-enabling effects.
	1- suitable for chronic anxiety 2- not effective in severe anxiety like panic attacks 3- not effective in acute anxiety states. 4- It has no hypnotic or anticonvulsant effects.	1- novel hypnotic drug specifically useful for patients who have difficulty in falling asleep.	1- A new class of hypnotics (orexin receptor antagoinsts 2- Suvorexant was approved for use as hypnotic by FDA.
	1- cns :headache, nausea, drowsiness but sedation is minimal. 2- paresthesias may occur. 3- tachycardia 4- eye: causes a dose-dependent pupillary constriction (miosis). 5- Other : palpitations, GI distress	1- dizziness 2- fatigue 3- endocrine changes (increases prolactin and decreases testosterone).	