TCAs - Tricyclic Antidepressants

Relatively safe, effective, few significant side effects when taken correctly.

Act by blocking reuptake of nor-epi and serotonin thereby extending duration of action.

Side effects (due to anticholinergic properties) include blurred vision, dry mouth, urinary retention, tachycardia and sometime orthostatic hypotension. May lower seizure threshold resulting in increased risk of seizures in patients with existing seizure disorders.

In overdose they have severe cardiotoxic effects therefore a favored drug for suicide. Can induce AMI and dysrhythmias.

TCA OD tx is primarily supportive and sodium bicarbonate can be given 1 mEq/kg loading dose and then 0.5 mEq/kg q10 min subsequent doses to alkalinize the urine and promote excretion.

Prototype: imipramine (Tofranil)

Others: amitriptyline (Elavil, Limbitrol)

clomipramine (Anafranil) desipramine (Norpramin) doxepin (Sinequan)

nortriptyline (Pamelor, Aventyl)

protriptyline (Vivactil) trimipramine (Surmontil)

Antipsychotic Medications

Block dopamine, muscarinic acetylcholine, histamine, and alpha1 adrenergic receptors in the CNS. Therapeutic effects appear to be due to blockade of dopamine receptors while side effects appear to originate in blocking the other receptors.

Two chief pharmaceutical classes of antipsychotics are phenothiazines (low-potency) and butyrophenones (high-potency). Both classes produce the same effect. A common side effect is extraphyramidal symptoms (EPS). Side effects can be effectively and rapidly treated with diphenhydramine (Benadryl).

There are also atypical antipsychotics that block more specific receptors and do not cause EPS.

Prototype phenothiazine is chlorpromazine (Thorazine).

Others: fluphenazine

perphenazine prochlorperazine thioridazine trifluoperazine

Prototype butyrophenone is haloperidol (Haldol).

Other typical:

fluphenazine (Prolixin)
loxapine (Loxitane)
molindone (Moban)
thiothixene (Navane)
pimozide (Orap) - for Tourette's syndrome, severe
thiothixene

Atypical antipsychotics include:

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clozapine (Clozaril, FazaClo)
risperidone (Risperdal)
ziprasidone (Geodon)
quetiapine (Seroquel)
olanzapine (Zyprexa)
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Antipsychotics, other: aripiprazole (Abilify)
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Antidiabetics (not including insulin)

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Alpha-glucosidase inhibitors
acarbose (precose)
miglitol (Glyset)
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Biguanides

metformin (Fortamet, Glucophage, Glumetza, Riomet)

Meglitinides

nateglinide (Starlix) repaglinide (Gluconorm, Prandin)

Sulfonylureas

glimepiride (Amaryl) glipizide (Glucotrol) glyburide (DiaBeta, Micronase)

Thiazolidinediones

pioglitazone (Actos) rosiglitazone (Avandia)