

## Dr ROGER PATERSON

MB BS, FRCPsych, FRANZCP  
Cert. Child Adol. Psych  
Provider No: 0340213L  
PSYCHIATRIST

Suite 37, Hollywood Specialist Centre  
95 Monash Ave, Nedlands WA 6009  
Tel: 9389 5155 Fax: 9389 5166  
37reception@gmail.com  
Mobile: 04111 55 439

## ADHD Medication Treatments

1. **STIMULANT MEDICATIONS** – are the best. They stimulate an underactive part of the brain to become more active and organise the rest of the brain activities. If you like, the 'sleepy conductor' is stimulated to wake up and take charge of the brain 'orchestra'.

The two best stimulant chemicals for ADHD are: **dexamphetamine** and **methylphenidate**.

- Dexamphetamine was the original, being in clinical use since 1937.
  - a) The immediate-release type is called dexamphetamine and only comes in 5mg tablets. They are useful, but only last about half a day and hence longer versions are now available. They are safe, non-addictive and have few significant side effects. But they can be misused for non-therapeutic reasons and hence are restricted to prescription by medical specialists (usually paediatricians and psychiatrists) who may co-prescribe with GPs after treatment is stabilised.
  - b) There are two types of slow release dexamphetamine:
    - i) **Compounded dexamphetamine** – made up by specialist compounding pharmacies of which there are about 25 in Perth/Bunbury/Albany. Any size from 5 to 60mg can be made, in capsule form. They last longer because it takes longer for the dexamphetamine to be absorbed from the stomach as it is bound with a substance that is harder to digest (Methocel).
    - ii) **Lisdexamphetamine/Vyvanse** – this can be dispensed at any pharmacy, comes in 3 capsules sizes (effectively small, medium and large, 30/50/70mg capsules) and last longer because the dexamphetamine is bound with lysine (an amino acid found in ordinary food) which slows down the dexamphetamine metabolism in the liver and in the blood.
- Methylphenidate, again available in immediate release and slow release formulations.
  - a) Immediate release formulation is known as **Ritalin** and comes in 10mg tablets. It was invented in about 1950 to be very similar to dexamphetamine, but not exact. For most people, it has a similar action to dexamphetamine, but some people might find it much better, or much worse.
  - b) Again, Ritalin only lasts about half a day, and there are two slow release formulations which last all day:
    - i) **Ritalin LA**, comes in 10/20/30/40mg capsules.
    - ii) **Concerta**, comes in 18/27/36/54mg capsules. Concerta lasts a bit longer than Ritalin LA (12 hours compared to 10 approximately).

## 2. NON-STIMULANT MEDICATIONS –

- a) "Stimulating antidepressants" – these medications take a week or two to work, and probably a month or two to be fully effective. The most popular is atomoxetine (trade name Strattera) which comes in various sized capsules. Other popular ones are bupropion (Zyban) and fluoxetine (various trade names including Prozac and Lovan).

- b) Clonidine (Catapres) – especially useful as a calming agent, mostly taken at night, but occasionally useful during the day for hyperactive patients.
- c) Guanfacine (Intuniv) – similar to clonidine, calming but also helps with concentration.

The stimulating antidepressants and clonidine may be combined with stimulant medications.

- Other medications commonly used by ADHD patients for co-occurring conditions.

- a) Hypnotics (ie sleeping pills) - for comorbid insomnia. Common ones include temazepam, zopiclone (Imovane) and zolpidem (Stilnox) - useful but addictive and therefore best used short term or intermittently. Non-addictive hypnotics include old-fashioned antihistamines (no prescription needed), melatonin (natural, and cheaply sourced online) and a few sedative antidepressants.
- b) Antidepressants - for comorbid anxiety and/or depression. They combine well with stimulants.
- c) Tranquilisers - for calming and mood stabilising. There are two types: addictive and non-addictive. Addictive tranquilisers include diazepam (Valium), lorazepam (Ativan), and alprazolam (Xanax). Common non-addictive types include risperidone (Risperdal), olanzapine (Zyprexa), quetiapine (Seroquel) and aripiprazole (Abilify). Both types can be used in the short-term (ie days/weeks) for controlling such things as agitation, sleep problems, temper and mood instability. If tranquilisers are needed long-term (ie months/years), non-addictive types are preferred. But they can have longer term side-effects (eg weight gain, movement disorders) and need to be monitored.
- d) Mood stabilisers - psychiatry 'borrows' neurological medications which stabilise epilepsy and uses them for in psychiatry for stabilising mood. Popular ones include lamotrigine (Lamictal), sodium valproate (Epilim) and carbamazepine (Tegretol). They take a few weeks to work and blood levels need to be checked to make sure the dosage is at the right therapeutic level.
- e) Occasionally, all of the above medications may be combined so that the patient may be on a combination of a stimulant medication, an antidepressant, a tranquiliser or a mood stabiliser. Obviously, the fewer the medications the better, but sometimes multiple medications (known as polypharmacy) are necessary.