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INFORMATION SHEET

MEDICATION AS PART OF THE MANAGEMENT OF AD/HD

Attention Deficit Hyperactivity Disorder (AD/HD) is a medical condition, thought to be due to cerebral dysfunction, probably to neurotransmitter deficiency in the frontal lobe of the brain, this area being responsible for impulse control and concentration.

Stimulants should always be used in conjunction with appropriate educational and other management strategies, however, they have been used for many years, first being used in children with problems of inattention and behaviour in 1937. Subsequently many studies showed them to be both safe and effective. Methylphenidate (Ritalin) and dexamphetamine (Dexedrine) are the commonly used stimulants. They are not sedatives, nor do they slow a child's mind down. They help the child focus, stay on task, and reduce impulsive and hyperactive behaviour. In addition, the children tend to be less insatiable, going on and on about things, less restless, to be generally calmer and frequently less oppositional. In addition, their self-confidence and frequently their social skills slowly improve, as do many of their learning difficulties. Relationships and communication also improve. The school particularly notice more 'on task' behaviour and less disruption, and frequently an improvement in their writing, and better socialising.

Stimulants are not a cure of AD/HD and its associated difficulties, however, they may help a child achieve as above and also achieve to his/her potential, academically, behaviourally and socially. Many children in time outgrow the need for medication, depending on relative maturity.

Numerous studies show medication to be effective in between 70-90% of children with AD/HD, even when multiple co-existing conditions are present. Whilst the short to medium term improvement is definitely proven, long-term benefits are being seen in most clinics dealing with AD/HD, and while some studies have been done, the definitive long-term proof is still awaiting final studies. This should not, however, detract from the decision to use medication where appropriate, as this really depends on the significance of the problem at the current time, and response to medication. Younger children may require more frequent timing of the dosage as the medication tends not to last so long.

The medications for AD/HD usually start to show effect within 15 to 30 minutes and have worn off in 3 to 5 hours. There is some stimulant remaining in the blood stream for up to 12 hours, although this is not usually clinically effective. A higher dosage is therefore usually given in the morning and lower dosing as the day progresses. Most learning also takes place in the morning.

SIDE EFFECTS

Ritalin is well researched, with at least 150 well documented studies showing its effectiveness, and that it is relatively free of side effects. Almost all the early onset side effects that are seen are related to a specific timing or dose of medication, which will only last as long as the medication lasts. However, long term side effects that have been suggested include:

Growth retardation: There were some studies suggesting that height retardation was a problem. The consensus of opinion is that this is now not the case, but we nevertheless watch height to be absolutely certain.

Possible addiction: This has not been proven in almost 50 years of stimulant usage. Stimulants, in fact, help the child to focus on reality, and one never sees a child who has a craving for his/her next dosage. He/she may well have a recurrence of previous behaviour and may well seek treatment for this, as would a wheezy asthmatic. However a craving for the medication is not there.

Short term problems include:

Appetite suppression: This is probably the most frequent side effect we see, and whilst it often diminishes over the first few weeks of medication, it can persist. Rarely, however, is it severe enough to warrant cessation of medication. There is sometimes some weight loss over the first few months but it usually picks up later. Whilst the medication is usually given with meals, this is not always the case, and to obtain maximum effect during the school day, it sometimes needs to be given before or after meals. Frequent snacks, eating late in the day or first thing in the morning when the medication is not working sometimes helps.

Abdominal pain/headaches: These occasionally occur in the first week or in the first few days, but rarely persist. Often the headaches and abdominal pain that have been secondary to the stress of untreated AD/HD in fact improve once treatment is started.

Loss of sparkle or slight change in personality can occasionally occur. This is minimised if the dosage is increased slowly, and usually improves with time, or with a slight reduction in dosage. One would never leave a child on medication were these side effects persisting.

Sleep difficulties: Too high a dosage of medication too late in the day can make it difficult to settle the child for sleep. Sometimes even a very small dosage at midday can do this, and in contrast, other children can take a large dose with the evening meal and still sleep well. Sleep difficulties are very much an individual problem, and modification of dosage may be necessary.

The rebound effect: Some children, especially those who are hyperactive, become even worse as the medication wears off. In practice, this means that the subsequent dose of medication should be given before this happens to allow a smooth passage through the day.

Tics: These involuntary movements or vocal tics occasionally occur with AD/HD and if severe may be related to Tourettes Syndrome. Although it is frequently said that Ritalin aggravates them, it sometimes actually improves them, and they are not necessarily a contra-indication to the use of

Ritalin. Sometimes a second medication is necessary to control them.

Itchy skin rashes, a feeling of depression, depression or mood change, or nausea can occasionally occur.

Whether or not holidays off the medication are necessary depends on the child. Some children, especially those with inattentive AD/HD only need medication during school times, others on a more regular basis. It is difficult to stop stimulants if there are significant behavioural difficulties, and it is usually very clear to the family whether a child needs ongoing medication. However, once a year, it is worth a trial off medication for a day or two or possibly a week, to be absolutely certain that there are no difficulties. Medication can be stopped suddenly without the need for a tailing off period.

GUIDELINES FOR MEDICATION FROM COMMENCEMENT

1 Start at low dose and increase it slowly. For a child less than 6 years of age, we would start on a quarter of a tablet in the morning, and at lunchtime, and then increase to a third dosage later in the day if necessary after 3 or 4 days. Depending on response, the child may need to go to half tablet dosages or even three quarters to one tablet, depending on progress, and phone conversations. Adjustments are usually made every 2 to 3 days, depending on feedback from the parents, and, if appropriate, the teachers. Remember that the medication duration is frequently less in this age group, often only being 3 to 3½ hours.

In children between 6 and 12 years of age, we would normally start with a ½ tablet in the morning and at lunchtime, and then increase depending on response, and age, by quarter to half tablet increments to a maximum of 4 tablets per day.

In an adolescent child, we would usually start on 1 tablet morning and lunchtime, and increase by ½ tablet increments as necessary, and increase to a maximum of 6 tablets per day if necessary.

The scheduling will be individualised for each child in the chart attached to this leaflet.

2 Some children, if behaviour is particularly difficult before going to school, need a small dose on waking and a subsequent dose before they go to school. Some children may need two dosages, ie. at break time and lunchtime, again depending on duration and scheduling.

3 Advice should be sought from the paediatrician if side effects persist, or if there are problems in dosage adjustment. Most side effects are transient and can be aggravated by too rapid an increase in dosage or too high a dosage. Many other problems are related to timing or short duration of the medication.

4 If Ritalin does not seem to produce the expected response, the dosage may be too low, the timing wrong, or it may be that medication is not suitable for your child, and alternatives will need to be considered. It may be that in fact the core AD/HD symptoms, ie. concentration, impulsiveness and hyperactivity, have been improved, but the residual difficulties lie with co-existing problems, such as oppositionality or obsessions.

5 Usually, on the day of finding the correct dosage, an improvement in concentration and distractibility will be seen. Within weeks and months, self-esteem, school progress, socialising problems, etc. start to improve. Once this improvement is seen, more appropriate behavioural and educational strategies can be tailored to the child's needs.

6 This fine tuning of medication in conjunction with other strategies is vital for the most optimal response. It is important that you discuss the usage of stimulants with your general practitioner, and there are several recent articles on stimulant usage which we will normally have included with our information. Apart from prescribing, his/her support is vital in the early days and later in the management of AD/HD

Ongoing monitoring and re-assessment is also essential, and it is suggested that all children be reviewed on a regular basis, to ensure continuing benefits and to address any problems that may arise.

It is important to realise that a great deal of mis-information currently exists about AD/HD and about treatment with stimulants. There is a considerable lack of knowledge and stimulants are frequently said to be dangerous, addictive or ineffective. These statements are untrue, and when correctly diagnosed those who are experienced in the nature of the condition and its management, the benefits to both the child and family are usually very apparent. Left undiagnosed and untreated, co-existing conditions tend to develop, causing ongoing stress, underachievement and other problems to the child and family. The importance of early diagnosis and appropriate management cannot be underestimated.

Name: DOB:
Medication:

	Time					
Step 1						
Step 2						
Step 3						

Use the lowest dose that is effective.
Please phone/email us within two weeks of starting, and at any stage if there are concerns.

Email:

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Specialising in neurodevelopmental disorders, especially ADHD and related conditions, in children and adults
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