

Ask the MAB

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There seems to be many different types of drugs that can be used to treat people with TS. I had heard that doctors often use a stepwise approach in selecting the right medication for tics. What does this mean?

Indeed there are many medications that have been used to treat tics. This is at least in part because none of the medications work for everyone. It is therefore important to have a clearly thought out plan of how and when to treat patients with tics. One must first consider whether treatment is necessary at all. In general, doctors only recommend treatment for tics when tics cause physical discomfort, social embarrassment or when tics interfere with everyday functions e.g. writing, walking or speaking. If and when treatment is deemed necessary, there is a fairly well accepted logical sequence of steps to be followed. Often the first treatment involves behavioral intervention such as habit reversal. Unfortunately this treatment is not yet widely available and it does not work for everyone. When treatment with medication is required, doctors like to begin with those medications which are least likely to cause adverse effects and are effective in reducing the tics. In practice, most doctors begin with guanfacine or clonidine, both of which work in a similar way. These medications have about a 60% -70% chance of working to decrease not only tics but also anxiety and help patients to fall asleep more quickly and easily. There is also some evidence that this type of medication can improve attention somewhat. If this treatment is not successful, then the usual next step involves prescribing neuroleptics such as aripiprazole, ziprasidone, risperidone. The older medications in this group include fluphenazine, haloperidol and pimozide. Neuroleptics in general have a wider range of adverse effects and require more extensive and regular monitoring of weight as well as blood work and EKG. How to choose among the neuroleptics is still open to debate and involves clinical judgment as well as cost considerations. If the above-mentioned treatments are ineffective, or not well tolerated one may consider still other medications, e.g. Tetrabenazine. There are still

other medications that have been proposed for treatment of tics but these generally have only weak, if any evidence to support their usefulness.

Some individuals with TS often take different medications at the same time. I'm told that this can be dangerous as these medications can interact with each other. How will I know if this becomes a problem for my son or daughter who has TS?

The majority of individuals with TS who present at a doctor's office with more than one condition can often require treatments of more than one medication. These medications can sometimes interact in detrimental ways. The most common concern is that adding a new medication can slow down the elimination of the other medication, which has the same effect as increasing the dose. The doctors usually try to anticipate such problems and avoid them e.g. by not using combination of medications which are known to have a strong interactions. Nevertheless such problems may arise especially in cases where the patient is a "slow metabolizer," which means that the such a person tends to eliminate medications more slowly than expected. The most important time to watch for problems is when a new medication is added to the previous one. The most common adverse effects involve dizziness, light headedness, feeling sleepy, tired, or nauseous. When introducing or adding a new medication such problems may be temporary and because often the patient's body adjusts after a few days, symptoms disappear. If the symptoms are severe or persistent it is important to speak to the doctor or to seek emergency services to obtain medical advice.

Why is it that the drug which works very well in one person with TS may work poorly or not at all for another individual with the disorder?

As noted above, there is no drug which works equally well for all individuals with TS and incidentally this is true for most other conditions. Tourette Syndrome is a complex disorder as reflected in its changeable nature and wide and variable range of severity. This is further complicated in the

presence of the numerous possible co-morbidities. The severity of symptoms also depends on external circumstances that may cause excitement or stress which are well-known to increase the severity of symptoms albeit temporarily. Much also depends on the individual personality, psychological makeup and family and work environment. Moreover, so far we do not have a treatment that is designed specifically for TS. All of our treatments aim to reduce the symptom severity, but do not address the underlying cause of the disorder. Ultimately, we just don't understand TS well enough.

My son has tics in different areas of his body. Are some drugs more suitable for certain types of tics compared to others?

It is typical for symptoms of TS to begin around the head and neck, especially the eyes and the face, however any part of the body may be involved at different times. Doctors believe that this is due to changes in brain development which may occur in different parts of the brain at different times. Medications that are available to us tend to act on the whole brain and not on a specific part of the brain. Many medications we use act by blocking dopamine receptors which again occurs throughout the brain. As a result, we do not have medications that address one type of tic or another. If and when the medication is effective it reduces all tics but not always to the same extent.

Are medications used in adults for TS the same as those used in children with the disorder?

Just as we do not have medications that are specific for one type of tic or another, we do not have medications which are useful only for children or only for adults. We use the same medications in children as we do in adults, however most doctors prefer to avoid using neuroleptics in younger children, unless it is necessary because of severe symptoms. Medications such as guanfacine and clonidine are the first choice in children because they are associated with lower risk of adverse effects and when these are present they are generally mild. As discussed above in the answer to question #1, doctors tend to use the same stepwise approach in treating children and adults with TS. ■

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