

Outline and evaluate biological therapies as treatments for depression.
(15 marks)

One theory of why people develop depression is that biological factors play the biggest part. The biological explanation states that lower levels of neurotransmitters, mainly serotonin, due to lack of absorption in the brain can cause a depressed state. Because there are different explanations of depression there are also different treatments.

One biological treatment of depression is Electroconvulsive Therapy (ECT). This procedure involves giving an electric shock of up to 370 volts to the brain bilaterally (to both sides of the head) with electrodes. The shock induces a seizure similar to those experienced in epilepsy which lasts between 15 and 60 seconds. Treatments are administered from between four to six times usually over two to three weeks.

ECT has a bad reputation, mainly because of the time when it was given to a patient sometimes without consent and without anesthetic. However in more modern practice patients are given muscle relaxants to prevent injury and anesthetized.

Despite its bad press there is good evidence that ECT does work in reducing the symptoms of depression, in the short term at least. Eranti et al (2007) assessed 46 patients with major depression after either being given ECT or exposed to large magnetic fields (which are also thought to improve depression). They assessed them immediately, after one month and after six months using standard depression scales and found that 59% of the patients who were administered ECT went into remission compared to just 17% of those who were given no treatment. This shows clearly that ECT does work; there is a big difference between those who were given ECT and those who tried a different treatment. However after the six month check up most patients were again suffering from major depression. This suggests that ECT is effective in the short term as perhaps a quick fix for those who suffer from manic depression however as a long term treatment it is not as effective.

However ECT is an extreme treatment with several ethical issues to consider. It can have several negative side effects. Rogers et al (1993) found that ECT is very distressing to patients and can even cause memory loss, in the past patients may even have experienced broken bones. Johnstone (1999 and MIND 2001) found that some patients may react to ECT with strong and enduring feelings of terror, shame, humiliation, failure, worthlessness and betrayal and a sense of having been abused and assaulted.

There is a difficulty in suggesting that ECT is a good treatment when it can cause so many bad feelings and negative side effects. However evidence shows that it does work even if we do not currently fully understand how it works. Perhaps it is most useful therefore in patients that need a quick but temporary cure such as those experiencing suicidal thoughts.

ECT may be a last resort for most and quite an extreme measure; there are alternative treatments that have also been proven to improve patient's depression.

Drug treatments are the most common and widely used treatment for depression in today's society and they mostly work by increasing the chance of neurotransmitter absorption. Monoamine oxidase inhibitors (MAOIs) work by preventing the breakdown of serotonin, noradrenalin and dopamine in the synapse so that all levels of monoamines can build up and stand a better chance of being absorbed. Tricyclics work slightly differently and block the reuptake of neurotransmitters, thus allowing them to stay in the synapse longer and increasing the chance of being absorbed. Finally Selective serotonin re-uptake inhibitors (SSRIs) work in much the same way as Tricyclics they block the re-uptake of neurotransmitters, this time however only serotonin, again to increase the amount in the synapse ready to be absorbed.

On the face of it drugs seem like a quick effective and easy way to suppress a patient's depression. However there is an issue surrounding the effectiveness of the drugs themselves. There has been evidence to suggest that a placebo can be nearly as effective as real drug themselves. Arroll et al (2005) reviewed random and control trials with placebo conditions that investigated the effectiveness of antidepressants prescribed by GPs. Overall 56-60% of patients treated with real antidepressant drugs found an improvement compared to 42-47% of the patients who took the placebo drug. Although the group who took the real drugs did improve more than the control placebo group the difference isn't vast. This suggests that perhaps the thought of taking a drug that you believe will cure your depression is enough for a patient to improve. However there is an ethical issue if doctors started prescribing drugs that were placebo's as part of their conduct and human morality they cannot deceive patients and tell them they are taking drugs to improve their depression when they actually aren't.

There is some debate about whether antidepressants are an appropriate treatment. The problem is that there are alternative treatments that may be more effective. Pinquart et al (2006) concluded that psychological therapies were overall more effective than drug therapies. However drugs can be given and taken immediately where as there are vast waiting lists for psychological therapies.

Drugs are a way of improving a patient's depression however like all treatments they won't work for everyone, and they have their flaws. Patients can suffer from side effects and become addicted to them over a longer period of time. However perhaps for a short term treatment to remove the symptoms they are a good treatment.