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Few people can name a single drug used to treat Alzheimer's. Is this because despite decades of work, no effective treatment exists, never mind a cure?

What exactly is Alzheimer's ?

Dr Alois Alzheimer, a German neurologist, named the disease in 1906 when he observed unusual clusters of proteins, sometimes in a tangled mess, in brain cells of Alzheimer's patients. The affected brain cells should make an important chemical called acetylcholine, used in communication within the brain, but they are known to die when the mess of proteins builds up in them. The resulting brain shrinkage leads to the cognitive deficit and loss of memory classically seen in Alzheimer's patients. The television presenter, Fiona Philips, describes the agonising decline of her mother as she succumbed to Alzheimer's: in the final stages describing how her mother "spent whole chunks of time just sitting and staring ahead, only able to give out a series of sounds".

If only scientists could find a drug to stop the brain cells dying

So far they haven't, but drugs are at least available that boost brain levels of acetylcholine. They are donepezil (Aricept), galantamine (Reminyl – originally made from snowdrop and daffodil bulbs) and rivastigmine (Exelon). They can produce a slight improvement in brain function, but some argue that the effect is too small to really improve daily life, side effects are common and decline is still inevitable: one carer summed it up, "Aricept doesn't give you a lot more life, but the brain lasts longer in its current state". One other drug is available, producing slight improvements for more severe symptoms. It is called memantine and acts on glutamate, a different brain chemical.

Doctors sometimes prescribe antidepressants, sleeping tablets and even anti-psychotics to cope with the low mood, sleeplessness and agitation that can accompany Alzheimer's. Their use is controversial, and not ideal in a population who may be experiencing swallowing problems, falls and forgetfulness in taking tablets.

Drug discovery?

In 2011, the Alzheimer's Society [5] launched an exciting programme to test drugs currently used for other medical conditions for the treatment of Alzheimer's. Could it be that common drugs for diabetes, epilepsy, malaria and cholesterol help?

Music, memories and moderation

Oliver Sacks, the famous neurologist emphasises that, even in the late stages of Alzheimer's, the person is still 'alive inside' [6] (the inspiring documentary with this title is recommended). In stunning real-life stories, he has shown how music appears to 'call back the self', awakening moods, memories and thoughts that had seemingly been lost. He refers to music's extraordinary 'neural robustness' and describes one man, unable to tie his tie or find his way to the stage, yet able to perform a perfect piano solo. Music was shown to enliven, calm, focus and engage patients even after they had forgotten the music itself.

Reminiscing about the old times and avoiding social isolation also seem to help, whilst the Head of Research at Alzheimer's Research UK [7] broadly agrees that what is good for the heart is good for the brain, when he says that "eating a healthy, balanced diet, taking regular exercise and keeping blood pressure and weight in check can all help lower the risk of Alzheimer's".

MEDICAL JOURNALISTS' ASSOCIATION

Source URL:https://www.helencowan.co.uk/all-you-need-know-about-drugs-treat-alzheimers

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