of the glucocorticoid cortisol are causally related to the expression of anhedonia-like and anxiety-like behaviours in marmosets.
Method. Four marmosets (two male, two female) took part in the study. Cortisol and saline control injections were administered intramuscularly and salivary cortisol samples were taken before and after injections to determine if circulating cortisol levels changed from pre- to post-injection. To measure anhedonia-like behaviours, we trained marmosets on an appetitive Pavlovian conditioning paradigm, where animals learn to associate two anticipatory auditory cues (conditioned stimulus + or conditioned sitmulus -, CS+ or CS-) with the presence or absence of food reward (unconditioned stimulus + or unconditioned stimulus -, US+ or US-). Using cardiovascular telemetry probes and video cameras, we recorded animals' cardiovascular and behavioural arousal in freely moving conditions, comparing the injection of saline control versus 5mg/kg, 10mg/kg or 20mg/kg intramuscular cortisol. To measure anxiety-like behaviours, we used a human intruder (HI) paradigm, where marmosets are confronted with an unfamiliar human in their home cage. We recorded their behaviour on video cameras after saline control or 20mg/kg intramuscular cortisol. We used an exploratory-factor analysis (EFA) to determine how marmosets' behaviours towards the intruder loaded onto an 'anxiety-like' score. We then compared these scores under saline control versus cortisol conditions. Significance was set at $p < 0.05$.
Result. Unlike saline control, we found that subcutaneous injections of 20 mg/kg cortisol successfully elevated peripheral cortisol concentrations to levels equivalent to peak circadian concentrations ($p = 0.023$). In the appetitive setting, 5 mg/kg, 10 mg/kg and 20 mg/kg cortisol injections blunted anticipatory (CS+ induced) increases in behavioural arousal ($p = 0.004$) but did not alter anticipatory cardiovascular arousal. Consummatory behavioural and cardiovascular arousal also remained intact. In the HI test, 20 mg/kg cortisol injections moderately increased anxiety towards the intruder as measured by an increase in marmosets' EFA-derived anxiety-like scores ($p = 0.035$).
Conclusion. In marmosets, elevated peripheral cortisol levels are causally related to the behavioural features of blunted reward anticipation together with elevated anxiety-like behaviours characteristic of mood and anxiety disorders. Future work will characterise the neuroimaging changes induced by elevated peripheral cortisol levels and identify the regions of the prefrontal cortex contributing to HPA axis regulation and dysregulation.

Comparison between the efficiency of pharmacotherapy and cognitive behavioral therapy in reducing captagon (fenethylline) dependence and relapse prevention

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Aims. To examine the therapeutic efficacy and effectiveness of cognitive behavior therapy and pharmacotherapy in the treatment of Major Captagon (Fenethylline) Dependence.
Method. A 41 outpatients males selected for the study, diagnosed as they are suffering from Captagon Dependence according to the DSM-5, with mean age 34.58 ± 5.11. The sample was divided into three experimental groups, (A) (N = 14) treated by cognitive behavior therapy (CBT) and pharmacotherapy in combination. (B) (N = 13) treated by CBT alone. (C) (N = 14) treated by pharmacotherapy alone. All groups were assigned to four measurements, one for the baseline before any treatment interventions, one post-treatment evaluation and two for follow-up within a short and long time. Non-parametric statistics were used to analyze the data collected by SPSS.
Result. There is no significant intra-group differences were found in terms of baseline assessment. There was no significant discrepancy between the first and the second group except in the term of reducing Captagon craving, as it was clearer in the first group in comparison with other groups. There was a clear significant discrepancy between the first and third groups, for all the study variables and it is phases of assessment especially follow-up. There was a clear degree of differences among the second and the third group, through the different phases of post-assessment, which refers to the great efficacy and effectiveness of CBT in Treating Captagon Dependence CBT was proved to be more effective than pharmacotherapy in the treatment of Captagon Dependence. The combination of CBT and pharmacotherapy was more effective than each other alone in the treatment of Captagon Dependence and Relapse Prevention.
Conclusion. Available evidence suggests that cognitive–behavioral therapy is an effective intervention method for psychological aspects of automatic thoughts, depression, negative health beliefs, craving, and relapse prevention, although its efficacy in reducing Captagon (Fenethylline) dependence.

Multicentre evaluation of the pharmacological management of women with bipolar disorder in the perinatal period

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Aims. The pharmacological management of women with bipolar disorder in the perinatal period is challenging. This population has a high recurrence rate, but some medications can be a concern in pregnancy and breastfeeding. Little is known about prescribing practices in perinatal services, and the impact of medication on recurrence rates.

The aims of this study are: 1) to describe the use of medication in women with bipolar disorder in the perinatal period and 2) to evaluate the impact of medication on the rate of postpartum recurrence.
Method. Clinical data were collected from pregnant women with a diagnosis of bipolar disorder in the nine participating centres in the UK and who were not experiencing an episode of illness entering the postpartum period. Using a proforma, data were collected for the period between conception and three months postpartum: sociodemographic, reproductive, the severity of illness, medication and recurrence.

Data were analysed for association using $\chi 2$ tests and logistic regression.
Result. In this sample of 167 women, 91 (55%) were taking medication at delivery: 62 (37%) antipsychotics, 41 (25%) antidepressants, and 25 (15%) mood stabilisers. In 12 cases medication was reduced before delivery. Of those who were taking medication at delivery six decreased of stopped after delivery and one increased the dose. 42% of women in this sample experienced a recurrence, with 30% of the sample experiencing a manic/psychotic episode. There was no significant association between taking medication and recurrence $\chi\ 2(1) = 0.07$, $p = 0.79$. There continued to be no association in a multivariable analysis when adjusted for parity, severity (previous admissions, age at first treatment, bipolar

subtype), type of medication during pregnancy and immediate postpartum changes aOR 0.33 95%CI [0.03; 3.40], p = 0.35.
Conclusion. A high number of women with bipolar disorder are taking medication before delivery and in the majority, antipsychotics are prescribed. The postnatal recurrence rate in both medicated and unmedicated women is high. These results are in line with existing literature. Further work is needed in larger samples to provide clinical guidance for women and their clinicians.

Psilocybin: the magic medicine for depression?

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Aims. Depression is the single largest contributor to global disability. However, effective treatments are currently lacking, resulting in a significant burden of treatment-resistant depression (TRD). Psilocybin, a serotonergic psychedelic, found as the active compound in 'magic mushrooms', has been proposed as a novel therapeutic avenue for TRD. We aimed to evaluate the future feasibility and implications of psilocybin as a new antidepressant therapy.
Method. We reviewed and critically analysed the available literature on the efficacy and safety of psilocybin as a treatment for depression, and the potential pharmacological and psychological mechanisms of the therapeutic benefit. We discussed the relative contributions to this therapeutic effect of the pharmacological drug treatment, placebo effects, and the context and parameters of the psychotherapeutic experience. We reviewed legal, social, and economic barriers to primary research and clinical implementation.
Result. Psilocybin in combination with psychotherapy has been shown to be safe and effective in TRD. Its mechanism of action in TRD has not been fully elucidated, however reviewing functional neuroimaging studies demonstrated disparate short and long-term modifications of default mode network connectivity, suggested to represent a 'reset' mechanism of acute modular disintegration and subsequent reintegration which restores normal function, reviving emotional responsiveness.

Research suggests psychedelic treatment induces lasting personality, belief and attitude changes. The psychedelic drug itself, the context of the psychotherapeutic experience, and the post-drug integration therapy all appear to have a significant role. Preparation prior to treatment, the environment, context and support during the psychedelic experience itself, and the following long-term integration and support process must be considered.

Despite novel findings Psilocybin is a Schedule I drug; this imposes a persisting ethical barrier to clinical use. Prohibition of psilocybin results in high costs of drug supply, and potential for harmful drug-seeking behaviours. Therefore, complex socio-political factors currently limit wider implementation.
Conclusion. Psilocybin in combination with psychotherapy is safe and effective in TRD. The interacting and elusive therapeutic mechanisms have implications for clinical implementation. Preparation prior to treatment, the physical and social environment in which the psychedelic experience takes place, and long-term integration and support are considered to play a significant role. Optimisation of these parameters and cost-benefit analyses are required prior to this being feasible as a widely available therapy. Systemic legislative, political and social change will also be key to enable widespread clinical use. The promise of this therapy on a background of inadequate current antidepressant treatments indicates these must be a priority.

Buspirone in obsessive-compulsive disorder: a potential dark horse?

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Aims. Pharmacological management of Obsessive-Compulsive Disorder (OCD) presents a challenge in modern psychiatry. While most patients respond preferably to serotonin re-uptake inhibitors (SRI), the response is usually delayed by several weeks leading to an insufficient short term management of anxiety. It is also frequently inadequate and needs higher doses and augmentation in many instances. Investigating newer pharmacological strategies to address such treatment gaps has always been of interest. Buspirone is a novel anxiolytic medication with additional weak antidepressant and poor anti-psychotic effects. It is the only medication in its category, i.e. azapriones. It has comparable anti-anxiety efficacy to that of benzodiazepines without their sedating or habit forming effects, and has been demonstrated to moderate serotonin and other monoamine neurotransmission with a favourable safety profile.
Method. We reviewed the literature pertaining to the use of Buspirone in OCD for both as a primary anti-obsessive agent and for a potential secondary role in management of chronic anxiety and/or anxiety disorders comorbid to OCD.
Result. The results of a number of case reports and open trials have been positive while controlled trials have shown contradictory results. In a double blind RCT comparing clomipramine and buspirone, significant improvement was found in both groups with no differences between the two. Further two trials observing buspirone augmentation of clomipramine and fluoxetine treatment respectively, in a double-blind placebo controlled design reported significant improvement in the treatment as opposed to the placebo arm. Another double-blind placebo controlled study of buspirone augmentation of fluvoxamine resistant patients did not show significant benefits as an anti-obsessional agent, but notable anxiolytic effects were reported. In all the trials buspirone was largely well tolerated and did not pose any significant interactions with other psychotropic agents or dependence potential.
Conclusion. Buspirone is a pharmacologically unique agent with a good safety profile. Given the robust anxiolytic effects of this Peron along with complex neurotransmission modulatory effects coupled with a favourable tolerance and dependents profile might make buspirone an attractive novel pharmacological agent for augmentation in OCD . Further controlled studies to better establish effectiveness and deciphering if certain patients may respond to its use over others, are warranted

The links between the amount of antipsychotic medication prescribed at GP practice level, local demographic factors and medication selection

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