Clinical picture

Novel drugs—novel branding

There has been increasing use of a number of different novel psychoactive substances (often referred to as ‘legal highs’) over the last few years. The drug that has received the most publicity is mephedrone. However, there were 41 new substances detected in Europe in 2010. These novel psychoactive substances are often purchased from Internet-based suppliers and are commonly marketed under broad categories such as ‘plant food’, ‘bath salts’ and ‘research chemicals’. They are also often sold under brand names such as ‘Ivory Wave’, ‘Head Candy’ and ‘Neuroblast’. Neither the broad categories or these brand names are representative of the actual contents of the products. There is often little information on the websites or the packaging as to the exact contents of the products and even when users believe that they are buying the same product, a number of studies have shown that the active ingredients may change with time.

As part of our surveillance of newly marketed novel psychoactive substances on the Internet we noticed two products being sold in May 2011 using branding very similar to food products that are widely available and commonly consumed (Figure 1). One of the products was branded similarly to Cadbury’s Flake, the other similarly to...
Kellogg’s Special K. Both products were purchased and analysed using previously described gas-chromatography mass-spectrometry (GC-MS) techniques.3,4

The ‘Flake’ product contained methiopropamine, methylenedioxyaminoindane (MDAI), caffeine, benzocaine and lidocaine. Caffeine, benzocaine and lidocaine are commonly found in both classical recreational drugs such as cocaine and novel psychoactive substances.2–4 Methiopropamine is a thiophene-based structural analogue of methamphetamine and methylenedioxyaminoindane is an inhibitor of serotonin, dopamine and norepinephrine uptake; both are sold by a number of Internet-based legal high sites. There are limited user reports on the desired and unwanted effects of methiopropamine. These appear to suggest that both the desired and unwanted effects are similar to those seen with ‘stimulant recreational drugs’ such as MDMA, amphetamine or cocaine.6 In particular, some users have described chest pain and palpitations associated with the use of methiopropamine.6

The ‘Special K’ product contained methoxetamine, which is a ketamine analogue. User reports suggest that methoxetamine is a dissociative hallucinogen, with similar desired and unwanted effects to those seen with ketamine.7–9 However, some users report that the undesired effects of methoxetamine are more prolonged than those seen with ketamine.9

It would appear from the limited available information from user reports on Internet discussion forums, that both of these products have the potential to be associated with significant acute harm/toxicity if used as a recreational drug. Clinicians should be aware that these latest novel psychoactive substances have the potential to be associated with unwanted effects and require management similar to that required for managing acute toxicity seen with classical recreational drugs such as cocaine, amphetamine or ketamine.

This report demonstrates that the marketing used by Internet-based legal high sites is dynamic. In addition to new marketing techniques, the contents of these products continue to evolve rapidly. The use of marketing of novel psychoactive substances using branding labels similar in appearance to commonly available and popular food products is a concern as it may increase the appeal of these drugs to individuals outside of the normal user group for these drugs.

Photographs and text from: D.M. Wood, Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust and King’s Health Partners and King’s College London, London, UK; S. Davies, Analytical Services International Ltd, St George’s University of London, London, UK; A. Calapis and J. Ramsey, TICTAC Communications Ltd, St George’s University of London, London, UK; P.I. Dargan, Clinical Toxicology, Guy’s and St Thomas’ NHS Foundation Trust and King’s Health Partners and King’s College London, London, UK. email: David.Wood@gstt.nhs.uk.

Conflict of interest: None declared.

References