Three patients with lead poisoning following use of a Chinese herbal pill

To the Editor—It was certainly not a surprise to us that traditional Chinese medication gave rise to the complication described in the paper by Auyeung et al.[1] In Hong Kong, the public often assume that these 'non-western' remedies are safe because they are termed 'traditional' and 'herbal', and are plant-derived products, but as many researchers have revealed, these traditional remedies can pose a significant health threat. Like western medicines, traditional Chinese medicine (TCM) may produce both predictable and unpredictable side-effects. Predictable effects may include direct toxicity, toxicity related to overdose of a preparation, and interaction with western pharmaceuticals. Unpredictable effects may include allergic and anaphylactic reactions, and idiosyncratic reactions. Many well-documented herbal drugs such as Aconitum (附子), known to cause toxic reactions, are available to practitioners for use in prescriptions. Drug-related side-effects may also be associated with the inappropriate handling or manufacture of these TCMs, for example, misidentification, lack of standardisation, substitution of one herb for another, contamination of the herbal preparations, and adulteration with western pharmaceuticals.[2,3]

Lead poisoning associated with traditional remedies or herbal medicine has been reported before. Lead intoxication from traditional Chinese remedies stems from two sources: the mineral drugs and contaminated herbal medicine.[4,5] Mineral drugs, such as Cinnabaria (硃砂), are commonly used for sedative purposes, and for systemic and skin infections given orally or topically like sulphur (硫磺), Realgar (雄黃), Calomelas (輕粉), and Chalcanthitum (膽礬). Contaminants of herbal medicines such as microorganisms, microbial toxins, pesticides, fumigation agents, radioactivity, and heavy metals have been identified. This highlights the need for good control of the starting materials and finished product, and the importance of good manufacturing practice in controlling the purity of herbal medications.

It is nearly impossible to estimate the incidence of adverse effects for traditional Chinese herbal medicine from case reports and case series alone, since the total exposure to a particular medicinal substance is unknown. There are currently insufficient data to fully quantify the risks presented by TCM. In order to improve the safety of TCM, more research must be undertaken. This should include the identification and characterisation of active constituents, in vitro laboratory studies on pharmacological activity and mechanism of action, identification of toxicological parameters such as LD50, and clinical trials on either the individual herb alone or in combination formulas.

At present there is no established mechanism for ensuring the safety of TCM, and no rapid system to warn the public against taking those remedies identified as dangerous. The Government should speed up legislation to improve the regulatory framework for TCM, eg setting up a regulatory body controlling the ingredients, purity and distribution, providing a proper channel to ensure that appropriate information is available to the public when they buy unlicensed herbal remedies, and restricting potentially toxic Chinese remedies to qualified TCM practitioners.

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Safety and comfort during sedation for diagnostic or therapeutic procedures

To the Editor—Having read a seminar paper by Hung et al[1] in the April 2002 issue of the *Hong Kong Medical Journal*, I would like to make the following comments. The paper, discussing safety and comfort during sedation for diagnostic or therapeutic procedures,[1] is concise and well presented, given the scope and confines of publication. However, I would like to add some of my thoughts and cautionary notes on the use of midazolam. As a sedative