

## 'Ice' an obsession - a dilemma for the future generation

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Dear Madam,

Through the esteem of your journal I would like to bring under your consideration a highly increasing form of drug abuse 'the Meth abuse' which is commonly known as "Ice or crank".

Meth is basically methamphetamine drug in its crystalline form. It was first synthesized by a Japanese physicist in liquid form and it was not until 1919 that it hit the market as crystals. Though it has been available for a long time, it got its real popularity status during World War II.<sup>1</sup>

Methamphetamine is a potent sympathomimetic and contributes to causing symptoms like increased mental and physical alertness, reduced hunger and thirst, risk and boosted self-esteem. The abuse of today has also reported similar symptoms such a euphoria, increased physical and mental abilities. Side effects include heart and circulatory complains psychotic attacks, progressive neurodegeneration, multiple tooth decay and osteonecrosis of the jaw.<sup>2</sup>

The oral symptoms of meth abuse are collectively known as 'meth mouth' and are becoming frequent encounters in the field of dentistry. Methamphetamine abuse has been reported to occur with osteonecrosis of the jaw and it is now being considered as one of the drug that causes " medication related osteonecrosis of the jaw" (MRONJ) although only a few cases have been reported and the exact correlation has not been established between MRONJ and meth, it is in the best interest for the research purpose. Other oral symptoms include excessive xerostomia, reduced salivary PH, decayed

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damaged discolored tooth and bruxism.<sup>3</sup>

The possible reasons for MRONJ and osteonecrosis due to methamphetamine maybe due to overall reduced remodeling and strong antiangiogenic potency of bisphosphates.<sup>4</sup> As methamphetamine is a sympathomimetic it causes the release of increased concentration of neurotransmitter dopamine and noradrenaline in the presynaptic cells from the vesicles into the cytoplasm which eventually is released into the synaptic cleft. Further more the drug also reduces the re-uptake of the neurotransmitter from the synaptic cleft making it more potent.<sup>5</sup>

The so called fashion drug, owing to its beautiful white crystals is cheap synthetic and highly addictive thus, it poses hazardous consequences in today's world. Actions must be taken at law enforcement levels where as research and treatments modality must be sorted out at medical health care providing levels.

### References

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