Khat (Catha edulis) is chewed for its central nervous system stimulant properties, which resemble amphetamine [1, 2]. The major pharmacologically active ingredient of the fresh khat leaves is cathinone, also known as natural or herbal ecstasy. Cathinone increases heart rate and blood pressure through norepinephrine release from peripheral neurones similar to amphetamine [3]. Therefore, it is not be surprising that central nervous and cardiovascular system effects from cathinone consumption may closely resemble those of amphetamine [4].

In his practice of obstetric anesthesia the author of this letter encountered two pregnant patients (recent emigrants from East Africa) presenting with hypertension, chest pain and arrhythmias following recent khat intake (unknown at admission). Both parturients presented a diagnostic dilemma to the health care team in this country (the United States) where physicians are not familiar with the tradition of khat chewing and possible systemic (primarily cardiovascular and central nervous system) effects of increased blood cathinone levels. The differential diagnosis included pregnancy-induced hypertension (a pregnancy specific disorder), a new onset cardiac arrhythmia (pregnancy is known to exacerbate symptoms in patients with underlying cardiac conduction abnormalities) and/or illicit substance intake (pregnancy is also known to enhance cardiovascular toxicity of amphetamine and cocaine). In both patients the routine urine drug screen showed trace amount of “amphetamine-like” substance (despite patients’ denial of recent amphetamine intake) and upon further questioning both patients admitted to recent khat chewing at family gathering.

Fresh leaves from khat trees are chewed daily by over 20 million people in several countries in East Africa and on the Arabian Peninsula [5]. Recently this sociocultural tradition has also spread to East African and Middle Eastern communities in other countries including the United States [6]. Khat consumption, traditionally confined to a certain segment of the population, has today become popular among all segments of the population (including reproductive age women). Many young women continue to chew khat during pregnancy and lactation [7]. While physicians in East Africa may be familiar with the adverse clinical effects of khat consumption in pregnancy, those who practice in other regions of the world may neglect to add cathinone-induced cardiovascular symptoms (hypertension) to their differential diagnosis of pregnancy induced hypertension. The author of this report is not aware of any other reports documenting cardiovascular complications of cathinone intake in pregnancy. With cultural and ethnic diversity in the United States, France and other Western countries continuing to rise, there is strong reason to consider ethnic social habits and traditions (such as khat chewing) in the differential diagnosis of unexplained symptoms (such as hypertension and/or arrhythmia) in pregnancy.

REFERENCES