

2016 Annual Scientific Meeting
FIT Open Mic Competition

Presenter: Gillian Beauchamp, MD

PRESENTATION INFORMATION

Title of Presentation: Gelsemium elegans: A Tale of Remedy and Poison

Abstract: It is a brisk day in the late fall of 2012. Alexander Perepilichny is found dead in his high-security estate in Surrey, England. British police determine there is no evidence of foul play in the death of this a wealthy Russian financier, who fled Russia to England in fear after blowing the whistle on senior officials involved in the theft of \$220 million from the Russian Treasury. It seems this fear is validated when a botanist, consulted by the patient's life insurance company, identifies traces of Gelsemium elegans in his stomach on autopsy. Gelsemium elegans, or 'heartbreak grass', has been one of the favorite poisons of Russian assassins. Was this man poisoned by an assassin during his stay in the luxurious Bristol hotel in Paris? Gelseminine and gelsemine, two toxic alkaloids in this stunningly beautiful plant are spinal convulsants. First, a feeling of relaxation, followed by debilitating fatigue. Then ptosis, diplopia, mydriasis. Acting at the respiratory center of the medulla oblongata, gelsemium slows respiration until the point of collapse - an exquisitely painful death. A strikingly cunning assassination. A potent glycine agonist, gelsemium has been used throughout history for neuropathic pain, tribal suicides, assassinations, and punishment by death. As noted in this tale of healing and death, the dose makes the poison – this stunning plant of yellow trumpet-shaped flowers at once possesses the power to relieve suffering and induce an agonizing death. A true pharmakon – both remedy and poison. Elegant, and beautiful – in the way deadly things so often are.

Objective 1:

To present an intriguing case of assassination by botanical agent: gelsemium elegans.

Objective 2:

To provide the audience with a brief history of the use of gelsemium elegans in assassination.

Objective 3:

To briefly review the proposed pathophysiology and presentation for gelsemium elegans toxicity.