

Kidney stone analysis and spiritual guides (pir faqir): the known-unknowns

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Dear Madam, Kidney stone disease represents a common referral for stone analysis in chemical pathology laboratories.¹ Given the irretrievable nature of the kidney stone an accurate compositional analysis is very important. Fourier transform infrared (FTIR) spectroscopy is a state of the art technique recommended by Urolithiasis of European Association of Urology 2013 for urinary stone analysis.²

The FTIR spectroscopy provides semi-quantitative evaluation of each chemical component of the kidney stones and hence has implications for understanding the epidemiology of stones in Pakistan.

Since Jan 2018 till to date we have identified four strange stones submitted to our clinical laboratory for analysis on separate occasions. The stones were received from different cities of Pakistan. All four stones were similar in appearance. Spectra generated by FTIR spectroscopy using Nicolet iS5 FTIR Spectrometer (Thermo Fisher Scientific Inc, USA) with Attenuated Total Reflection technology were compared with spectra in the NICODOM library. The library compared the unknown stone spectrum with around 756 synthetic reference kidney stone spectra contained in the library. In all four stones, the generated spectra did not match with the spectra in the library. The stones were re-analyzed with a manual chemical method to determine the content of calcium, oxalate, ammonia, phosphate, cysteine, uric acid and magnesium in the samples and again no chemical constituent was matched. Clinical history was sought. Details obtained over the telephone revealed that all four patients had pain in abdomen and were being evaluated by some 'pir' (believed to be endowed with mystical powers) for black magic. Without any surgery or any medication the pir had taken out the stones from their body in a bowl lying next to them or on the floor/ bed. Please note all four individuals had gone to separate 'pir' in their respective cities.

Pakistani cities, towns and villages are littered with such

fake 'amils' and 'pirs' who claim to be the expert in breaking the black magic and relieving the people of illnesses. They serve as the spiritual guides to the disciples (murid).³ In our society, due to lack of education and awareness, many people turn to these fake scholars with blind trust. These fake 'pirs' and 'amils' promise instant relief and results thus capitalizing on their urgency to see results. The lack of education leads to the vulnerability of these patients, thus believing every word these fake scholars say. The only way to overcome is to report such cases and bring awareness.

The analysis of kidney stones is important for the diagnosis and treatment of urolithiasis. The knowledge of the quantitative composition of kidney stones is essential for understanding their etiology. The incidence and nature of false stones, peculiar calculi and crystals growing on surprising materials has been reported in literature.⁴ The role of the biochemical laboratory is of outstanding importance, especially because the crystalline composition and the morphology and clinical history of such samples may provide clues to the etiology. Such unusual experiences where the identification of the stone remains questionable must always be shared. Once evidence accumulates and awareness grows, the potential for stopping this kidney stone scam exist.

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