

Gabriel KOVARI

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**POST MORTEM REPORT FOR HM CORONERS FOR EASTERN DISTRICT  
OF GREATER LONDON**

PM No. 405.14  
Your Ref. 01787-2014

**NAME** Gabriel KOVARI

**AGE/SEX:** 22 years Sex: Male

**DATE OF BIRTH** 17.06.1992

**DATE OF DEATH** Found dead on 28.08.2014 at 09.27 hrs

**DATE OF POST MORTEM** 01.09.2014

**ADDRESS** No fixed abode

**PLACE OF DEATH** Grounds of St Margarets Church, North Street,  
Barking, Essex

**PLACE OF EXAMINATION** Queen's Hospital, Romford, Essex

**CASE OFFICER** T Steadman

**PATHOLOGIST** Geraldine Soosay

This report consists of 4 pages

**CLINICAL DETAILS AND CIRCUMSTANCES**

The deceased was found dead by a member of the public walking her dog in the grounds of St Margarets church, North Street, Barking, Essex. The Police were called and found a bag with his personal possessions – he was sitting up against a wall and there was an empty 35cl bottle of vodka nearby and the medication in his bag included Clarithromycin, Ibuprofen, Tityperazine, and Cetirizine Dihydrochloride. There was no evidence of drug use and there were no marks or injuries.

**EXTERNAL APPEARANCES**

The body was that of a thin but adequately nourished young Caucasian man (height 181cms, weight 47kg). There were no wounds or bruises, and there were no needle marks identified in the skin. There was very early decomposition with greenish discolouration of the skin of the face, trunk, and anterior aspects of the upper and lower limbs. The eyes were shrunken and appeared desiccated and collapsed. There was no jaundice or pallor.

**INTERNAL EXAMINATION**

**Respiratory System**

**Upper respiratory tract:** The trachea mucosa was congested, and there were mucoid and frothy secretions.

**Lungs:** (L492g, R544g). Both lungs were congested and oedematous. There was no thromboembolus in the pulmonary arteries and no evidence of infection or of neoplasia. There was no pleural effusion.

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**Cardiovascular System****Heart weight:** 262g.**Description:** All three coronary arteries showed minimal non-occlusive atheroma. There were no abnormalities of the atria, valves or ventricles. The aorta and great vessels showed minimal atherosclerosis and the veins were normal.**Gastrointestinal System****Mouth and tongue:** Normal – there were no bite marks on the tongue.**Oesophagus:** Normal.**Stomach:** The stomach contained brownish fluid in which powdery debris was suspended.**Intestines:** The intestine showed no evidence of infection, infarction, haemorrhage or neoplasia.**Liver (1020g):** The liver was congested. The gallbladder, bile ducts and pancreas were normal.**Genito-urinary system****Kidneys:** (Left and Right 262g). The kidneys appeared healthy.**Pelvis & Ureters:** Normal.**Bladder:** The bladder contained slightly turbid urine.**Prostate:** The prostate gland appeared normal.**Central Nervous System****Scalp & skull:** There were no wounds or bruises of the scalp and there was no skull fracture.**Meninges:** There was no extradural, subdural or subarachnoid haemorrhage.

The cerebral arteries showed minimal atherosclerosis.

**Brain (1656g):** The brain was mildly oedematous, and softened – there was no evidence of haemorrhage or infarction and there were no focal lesions.**Reticulo-endothelial, endocrine and musculo-skeletal systems****Lymph nodes:** Normal.**Pituitary:** Not examined.**Thyroid:** Normal.**Adrenals:** Normal.**Spleen (132g):** The spleen had a firm dark red cut surface – a splenunculus was present.

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## Further Investigations

### Toxicology

Venous blood, urine, gastric contents and hair were forwarded to the toxicology laboratory at Imperial College for analysis. These demonstrated ethanol in the venous blood at level of 20mg/100ml, and in the urine at 16mg/100ml, well below the legal limit for driving.

However, analysis of the venous blood demonstrated Gamma-hydroxybutyrate (GHB) at a level of 758ug/ml, with Gamma-hydroxybutyrate also present in the urine. This level of Gamma-hydroxybutyrate in the venous blood is within the range of 27-1037mg/ml identified in seven deaths attributed to GHB abuse.

Mephedrone, a synthetic stimulant also known as MCAT, was identified in the stomach contents and urine, and in venous blood at a level of 0.92ug/ml – there is little data on toxicity in the post mortem situation, in the literature – one report of post mortem Mephedrone concentration indicates that it was present at a level of 0.5ug/ml in the venous blood in combination with Heroin.

Methylamphetamines was found in the urine, but not detected in the venous blood.

Ibuprofen was not detected in the venous blood.

A copy of the toxicology report, by Dr Susan Paterson, accompanies this post mortem report.

### Histology

Small blocks of the myocardium, lungs, kidneys, liver and spleen were retained for histological examination. There were no histological abnormalities on examination of sections of the heart, liver, kidneys and spleen.

Sections of the lungs showed intense pulmonary oedema and congestion and focal infection. There was no evidence of vasculitis, and no foreign material was identified in the lungs. There was no granulomatous inflammation.

### Comment

Of the further investigations conducted following post mortem examination, histological examination has excluded the causes of sudden death including myocarditis, pulmonary infarction, vasculitis or specific infection, hepatic steatosis, acute tubular necrosis of the kidneys (acute kidney injury), and in the spleen, malignant infiltration or granulomatous inflammation.

The results of toxicological examination of venous blood, urine, and gastric contents had demonstrated markedly elevated levels of Gamma-hydroxybutyrate (GHB) in the venous blood, a level of 758ug/ml, within the range, in the literature, of deaths attributed to abuse of GHB. In addition, Mephedrone, has also been identified both in stomach contents and urine and in the venous blood at a level of 0.92ug/ml, well above the Mephedrone concentration found post mortem in a case reported in the literature.

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An overdose of Gamma-hydroxybutyrate is likely to have severe effects on the central nervous system, resulting in coma and in severe respiratory depression and hypoxia, which will also affect the level of consciousness, leading to coma and death. Mephedrone also has effects on the central nervous system, increasing susceptibility to seizures, and may also have cardiotoxic and respiratory depressant effects.

In view of these findings, in my opinion, death in this case was due to a mixed drug overdose, the likely mechanism of death being respiratory depression and central nervous system depression leading to hypoxia, coma and death.

**CONCLUSIONS AND CAUSE OF DEATH**

- I Disease & Condition directly leading to death.
  - (a) Mixed drug overdose.
  - (b)
  - (c)
- Antecedent causes.
- II Unrelated (contributory).

Signed ....

**Signature**

G Soosay FRCPath, Queen's Hospital

Date 17<sup>th</sup> October 2014

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