not adopted but were developed by the authors based on previous relevant studies<sup>1-3</sup>. The questionnaire included sociode-mographic aspects such as sex, age, current semester, place of origin, residence, financial and family status, parents' level of education as well as information on tobacco and substances (cannabis, benzodiazepines, amphetamines, lsd, ecstasy, syrups, heroin, cocaine) abuse. As a smoker was considered a person who was smoking at least one cigarette daily. Due to the nature of the questionnaire, it was not validated.

T-test for normally distributed data, Man-Whitney test for not normally distributed data and Chi-square tests, were applied to examine associations between substance use and independent variables using SPSS version 12.0 for Windows.

From our sample, 114 students (27.8%) had used at least once one or more illicit drugs (of these 114 students, 19.5% had used cannabis, 9.75% amphetamines, 9.75% lsd, 5.85% inhalants, 5.8% benzodiazepines, 3.65% syrups, 2.7% cocaine, 1.2% ecstasy and 0.7% heroin). They had a higher mean age (Mean=21.55, SD=2.47) than those that had not used any illicit drug (Mean=20.67, SD=1.89), (p=0.000). Among them, men (n=62, 33.5%) have used more often an illicit drug than women (n=52, 23,1%) (p=0.019). One hundred and seven students were smokers (26%) and males (n=60, 32.4%) were smokers in higher percentage than females (n=47, 20.8%, p=0.009).

Variables such as residence, place of origin, financial and family status, father's and mother's level of education were not related to the use of illicit drugs. Users of at least one illicit drug (p=0.011) and tobacco users (p=0.013) report significantly more frequent problematic family relationships and problematic relationships especially with their parents, (p=0.001), while tobacco users were more often children of divorced parents or parentless compared to non tobacco users.

The high prevalence of illicit drug use even in students of health professions<sup>4,5</sup>- who are supposed to be well informed about the consequences of substance abuse- indicates the need to establish prevention programs during medical education which should consider the role of family relationships and mainly the communication of young adults with their parents regardless of parents' education level.

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3rd Psychiatric Department, School of Medicine, Aristotle University of Thessaloniki, AHEPA General Hospital, Thessaloniki, Greece.

Key words: drug, substances, abuse, students

Corresponding author: Styliani Spyridi, e-mail: spyridesstella@yahoo.com

# Spontaneous pneumothorax complicating sunitinib therapy

Dear Editor,

A 65-year-old male was diagnosed with a left renal tumor. Whole body CT scanning was negative for metastasis. The patient underwent left nephrectomy and pathological examination was consistent with a renal clear cell carcinoma graded 3 on Furhman scale. He was elected to undergo treatment with sunitinib. Chest CT six months later revealed small nodular formations in the left upper lobe 0.5-1 cm in diameter, enlarged mediastinal lymph nodes and bilateral pleural effusion.

Treatment with sunitinib was continued and two months later, he was admitted with a 5-day history of shortness of breath and pleuritic chest pain. Chest x-ray and CT showed pneumothorax on the left side. Additionally, a cavitation in one of the previously noted lung nodules was revealed and considered as the most probable cause of pneumothorax. A chest tube was placed urgently. Due to persistent air leakage and lung collapse under closed tube, it was decided that the patient was eligible for surgical intervention. He underwent a left mini muscle-sparing thoracotomy. The existence of ruptured bullae on a metastatic lesion was brought to light (Figure 1). Segmentectomy of the left upper lobe was performed. Additional metastasectomies for the other two lesions and a dry gauze abrasion pleurodesis completed the operation. Pathological examination confirmed the presence of metastatic renal carcinoma. One month later, a new chest CT revealed normal findings and sunitinib was restarted.

The suggested mechanisms for chemotherapy-associated pneumothorax include rapid tumor lysis and necrosis of the large metastatic pulmonary lesions, enlargement of a rapidly necrotizing tumor, chemotherapy-induced impairment of repair processes, and/or persistent local infection<sup>1</sup>.

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Kleontas A<sup>1</sup>, Asteriou Ch<sup>1</sup>, Lalountas M<sup>2</sup> Konstantinou E<sup>3</sup>, Barbetakis N<sup>1</sup>

<sup>1</sup>Department of Thoracic Surgery, Theagenio Cancer Hospital, Al. Symeonidi 2, 54007, Thessaloniki, Greece.

<sup>2</sup>2<sup>nd</sup> Propedeutical Department of Surgery, Aristotle University of Thessaloniki, Hippokratio General Hospital, Konstantinoupoleos 49, 54642, Thessaloniki, Greece.

<sup>3</sup>Department of Pneumonology-Oncology, Theagenio Cancer Hospital, Al. Symeonidi 2, 54007, Thessaloniki, Greece.

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Corresponding Author: Christos Asteriou, e-mail: asteriouchris@vahoo.gr

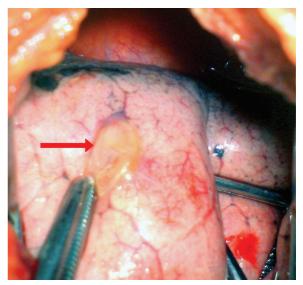


Figure 1: Intraoperative image of ruptured bullae on a metastatic lesion (red arrow).

## Surgical treatment of gastrointestinal stromal tumour of jejunum

Dear Editor.

Gastrointestinal stromal tumours (GISTs) are rare mesenchymal tumours of the gastrointestinal tract acounting 5% of all sarcomas. GISTs originate from interstitial cells of Cajal, which regulate the peristalsis mechanism of the gastrointestinal tube. Treatment may be surgical, conservative or both<sup>1</sup>. Here we report the case of a female patient with upper abdominal pain, obscure intestinal bleeding and anaemia.

A 43-year-old Caucasian female was presented to Emergency Department with a 15-day history of upper abdominal pain and fatigue. Physical examination and blood biochemistry were normal. Haematological tests proved anaemia, throm-bocytopenia and obscure intestinal bleeding. CEA and CA 19-9 were normal. Use of NSAID was not mentioned. Chest and upright abdominal X-rays, abdominal ultrasonography, upper gastrointestinal endoscopy and colonoscopy did not reveal any significant findings. The abdominal computed tomography indicated an extraluminal, well-delimited formation of jejunum, measuring  $4\times3\times5$  cm, possibly malignant. Wireless capsule endoscopy revealed a cancerous mass that partially obstructed the lumen of jejunum. Exploratory laparotomy confirmed a haemorrhagic tumour at the end of jejunum, without presence of adhesions to surrounding tissues. Local resection of the tumour was performed at 15 cm both proximally and distally, to have an oncologically safe margin. Histopathological examination confirmed a GIST of jejunum with mitotic activity >2 mitosis per 50 high-magnification optical fields (m  $\leq$  2 / 50 OPMM). Regions with cystic degeneration and haemorrhagic infiltration were recognized. The immunohistochemical study showed positive indicators for identification of tumour: C Kit + (CD 117), CD34 +, S100-, Actin +, Desmin-. The lymph nodes in adjacent mesenteric tissue were metastasis free. The patient was discharged in good condition on the 5th postoperative day and up to today is regularly followed up at the oncology outpatient clinic.

Primary surgical aim is to completely remove the tumour<sup>2</sup>. First-line adjuvant therapy is imatinib mesilate, a selective receptor tysorine kinase inhibitor that targets the KIT and platelet-Kinases. Another TKI, Sunitinib Malate is approved as second-line treatment for GIST patients, following failure of imatinib. Over the last decade patient management with GIST has greatly improved due to the introduction of TKI therapies, improvement of imaging modalities and surgical intervention.

A vast majority of patients can expect cure by expert surgical resection. As regards patients at higher risk of relapse, adjuvant imatinib may help prolong disease recurrence. Patients who suffer unresectable or metastatic GIST are treated successfully with imatinib<sup>3</sup>. For those who develop imatinib-resistance receiving imatinib in higher doses was tested successfully. For patients that imatinib can not control any further progression of the disease the only globally approved second-line TKI is sutinib<sup>4</sup> that has already given promising results. Research will probably have impressive results regarding the management of the disease in the future.

### **Conflict of interest statement**

No conflict of interest is declared by any of the authors.

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