

## CATEGORY I – CLINICAL PRESENTATIONS: GASTROENTEROLOGY

### 1.0 Introduction

Alcohol damages intra-abdominal organs such as the liver, causing alcoholic hepatitis or slowly progressive liver fibrosis leading to cirrhosis. Drugs that are given in ways that can allow blood-to-blood contact may transmit viral hepatitis (particularly hepatitis C) is a high risk infection in people who have injected drugs but is also found in people who snort cocaine as blood contaminated straws may transfer the virus.

#### LEARNING OUTCOMES

Medical students will gain knowledge in:

1. Recognising the multiple symptoms associated with alcohol misuse.
2. Appreciating the importance of a comprehensive drug and alcohol history in all patients with gastroenterological and hepatic symptoms.
3. Explaining the association between illicit drug use and viral hepatitis.

In England and Wales in 2016 it was estimated that in people who inject drugs (PWID) the prevalence of past and current hepatitis B (HBV) was 15% and 13% respectively, while that of hepatitis C (HCV) was 54% respectively.

#### Vignette

*Eric is a 37 year old man, who presents to A&E with a range of gastrointestinal symptoms, including abdominal pain, reduced bowel movements, recent rectal bleeding and a fever of 38.5°C. On physical examination he has abdominal tenderness on the left side. He talks about enjoying a drink when not working. When you explore further he describes his drinking pattern as drinking almost every day (one or 2 "small" beers in the evening with his meal and a few more at the weekend). He may have 1 or 2 days without alcohol, but usually drinks every day. He does not show any concern for his drinking and says that it does not affect his life, "although is getting expensive" so he looks for cheap beer. You ask him to write down what he drank in the last week, on a day by day basis, and then ask if this is his usual pattern, which he confirms. On calculating his units, it highlights that he is drinking at harmful levels as he is drinking more than 50 units a week (NHS 2012): Your drinking and you: The facts on alcohol and how to cut down). On further assessment he then goes on to tell you that he has in the past taken cocaine, but it was only at weekends, and he hasn't taken any for 6 months. On further exploration, he reports that he started taking cocaine at university (aged 18) used it frequently the "as everyone was doing it". He then reported weekend use or during holidays thereafter. He is surprised when you suggest that he has been using cocaine for almost 20 years. He then says "I'm no druggie". Until the doctor explored his drug use and reflected back what he told him, Eric was completely unaware or in denial about his substance use issues and the effect on his health and current problems.*

*What tests and investigations would you recommend?*

*What other interventions do you think will be useful for Eric?*

### 2.0 Context

Injecting drug users (IDUs) are at high risk from hepatitis B and hepatitis C due to sharing of injection equipment and through sexual contact. Hepatitis B disease can be prevented by vaccination. IDUs have been targeted since 1988 for vaccination. Despite this, both availability of vaccination and uptake by IDUs are recognised to be poor in the UK. Proactive provision of hepatitis B vaccination through widely available services is critical for protecting this difficult to reach target group.

Many studies show that substances can cause a number of physical health problems within the digestive system including cancer, vascular complications of the stomach enterocolitis and ischaemic colitis. Several gastrointestinal cancers are associated with excessive alcohol use. Synthetic drugs such as ecstasy may lead also to digestive and hepatic damage, as well as vascular complications of the stomach. Cocaine use can result in various gastrointestinal complications, including gastric ulcerations, retroperitoneal fibrosis, visceral infarction, intestinal ischemia, and gastrointestinal tract perforation

Nutritional deficiencies such as B vitamins, vitamin C and iron, can cause stomatitis in the lips and glossitis in the tongue (Elwood, 1984 as cited in Barclay et al, (2008).

### 3.0 Common presentations

Patients may present to services with a range of gastrointestinal problems affected directly or indirectly by their substance use. Some of the gastrointestinal effects of alcohol misuse include:

- Stomatitis
- Glossitis
- Reduced salivary production
- Enlarged adipose parotid glands
- Leukoplakia, erythroplakia and submucous fibrosis of oropharyngeal mucosa
- Oral lichen planus
- Disrupted oesophageal function
- Oesophagitis, gastritis, and duodenitis

# SUBSTANCE MISUSE FACT SHEETS

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- Oesophageal and gastric varicities
- Malnutrition due to altered small bowel function
- Acute and chronic pancreatitis

(Barclay et al, 2008)

### 3.1 Special/distinctive features

- Poor diet and nutrition from the lifestyle can be predisposing factors to gastroenterological and hepatic problems
- Poor immunity
- Damage to the digestive system as a result of the small packages of drugs being hidden in orifices such as vagina or rectum, or ingested as part of smuggling (“drug mules”)
- Patients may present with a history of self-medication with over the counter drugs to treat heartburn or acid indigestion
- Gastrointestinal bleeding, including Mallory-Weiss tear

### 3.2 Barriers

- Patients may not consider the effect that their substance use has on their system
- Fear of symptoms being life threatening
- Lack of detection or recognition by doctors in screening for substance use in patients presenting with gastrointestinal disorders

### 4.0 Assessment

Alcohol misuse is ubiquitous and causes abdominal pain, nausea, vomiting and haematemesis. Abdominal symptoms, such as non-specific abdominal pains, diarrhoea and constipation are common with many drugs (both licit and illicit). Liver failure is a rare condition characterised by deepening jaundice, increasing confusion, coma, ascites, sepsis and eventually death. Many drugs can cause liver failure but drugs of misuse, particularly ecstasy and herbal remedies, are often implicated.

Nausea and vomiting is typically caused by disorders of the digestive tract or the brain, or ingested substances. Many drugs, including alcohol and opioid analgesics, can cause nausea and vomiting. Severe alcoholism can induce Mallory-Weiss tears (also known as gastro-oesophageal laceration syndrome). This involves bleeding from tears in the mucosa at the junction of the stomach and oesophagus, and is caused by retching, coughing, or vomiting. For young adults or middle aged patients with a history of drug use and presenting with ischaemic colitis, consider cocaine-induced intestinal thrombosis.

### 5.0 Treatment

A careful history with details of current and past drug intake is essential. Details of actual alcohol intake are mandatory – vague statements such as ‘social drinker’ are meaningless.

Management focuses on harm reduction – patients should be encouraged to reduce their intake of harmful drugs and substitute medication (such as methadone for injecting drug users) should be made available. If reduction is declined every effort should be made to reduce harmful practices and

appropriate advice regarding safe injecting techniques, vaccination for blood borne viruses (hepatitis B) and provision of clean injecting equipment. All patients who have used or continue to use illicit drugs must be tested for viral hepatitis (hepatitis B and hepatitis C) and appropriate therapy offered.

Confirmed chronic HBV cases should be referred for specialist assessment and management.

Diagnosis will include endoscopic and histopathological testing, x-rays and scans in addition to routine blood tests. Consideration should be given to an alcohol detoxification and support in the community. For further reading see fact sheet on Alcohol Withdrawal.

For example, in the case of Eric diagnosis of alcohol related ischaemic colitis is based on the presence of rectal bleeding, abdominal pain, a history of substance use, substituted by endoscopic and histopathologic findings, and the absence of other aetiologic mechanisms of ischaemic colitis. Following tests and investigations, he is seen by his doctor who can then provide him advice about his drinking, assist him in calculating his units and help him consider ways to reduce his drinking to the recommended limit for harmful drinking. The hospital doctor can also refer him to an assessment for suitability to attend a stop drinking programme run by the local alcohol service.

### Hepatitis A

Intravenous drug users (IDUs) are at higher risk of hepatitis A infection due to poor living conditions with spread probably occurring through faecal contamination of drugs or injecting paraphernalia. Blood to blood spread through needle sharing during viraemia is also possible. When considering whether to give a single dose vaccine or combined e vaccine, consider the likelihood of a drug user returning for a subsequent dose. One dose of hepatitis A vaccine confers greater protection against hepatitis A than one dose of the combined vaccine because the combined vaccine only has half the amount of hepatitis A antigen than the single component vaccine.

- Vaccinate all injecting drug users against hepatitis A.
- Single component hepatitis A vaccine is preferable to combined hepatitis A and B vaccine.
- Hepatitis A vaccine is available as a single component vaccine or combined with hepatitis B vaccine. For a single vaccine, give 2 doses with the second dose after 6–12 months; the second dose may be delayed for up to 3 years.

### Hepatitis B

- Vaccinate all drug users against hepatitis B (non-injectors may become injectors).
- Use accelerated 0, 7 and 21 day schedule to aim to complete the course as quickly as possible, and although incomplete vaccination schedules offer some protection, completing the course is recommended.
- Offer hepatitis B vaccination to partners and children.

# SUBSTANCE MISUSE FACT SHEETS

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	ALCOHOL	OPIOIDS	SEDATIVE HYPNOTICS	STIMULANT DRUGS	HALLUCINOGENS	VOLATILE SUBSTANCES	DESIGNER DRUGS	OVER THE COUNTER DRUGS	HERBAL & "NATURAL"
Vomiting	✓	✓				✓	✓		✓
Abdominal pain	✓	✓			✓				✓
Constipation		✓							✓
Diarrhoea	✓			✓	✓		✓	✓	✓
Haematemesis	✓								
Acute liver failure				✓			✓	✓	✓
Chronic liver failure	✓							✓	✓
Viral hepatitis		✓		✓					
Exacerbation of pre-existing liver disease	✓	✓	✓						
Pancreatitis	✓								
Gastritis	✓				✓ (cocaine)				

### Hepatitis C

- Screening and diagnosis of infection enable patients to understand how they can implement life changes to slow the rate of HCV progression.
- No vaccine available.
- Consider antiviral treatment in chronic hepatitis C.

### 6.0 Referral/networks/services

It is helpful for patients like Eric to be referred to a specialist service, for example an alcohol liaison service (if it exists) or the local alcohol or substance misuse team, for further assessment and advice. Eric has not shown any signs of withdrawal, and he does not drink until the evenings. This would indicate that he does not require a detoxification, but he may benefit from some individual or group sessions to assist in his motivation to reduce his alcohol intake. This may also be available from his GP if the GP, or any other practice staff, is skilled and trained in substance misuse. Eric like other patients will require monitoring of the gastrointestinal problems and will need advice on what signs and symptoms to look out for and how he should respond.

### 7.0 References and useful resources

- Appleby, VJ; Darnbrough, E; Forrester, K; Simpson, R; Clarke, C; & Moreea S. (2015) PTU-118 An audit of the prevalence of chronic hepatitis C and treatment outcomes in drug users attending substance misuse centres in Bradford – planning for future service provision *Gut* ;64:A114 doi:10.1136/gutjnl-2015-309861.233
- Badrakalimuthu, V.R, Rumball, D & Chawla, A (2011) Hepatitis C: a patient's journey from a psychiatrists' perspective. *Advances in Psychiatric Treatment* 17 340-349
- Barclay, G.A, Stewart, J.B, Day, C.P and Gilvarry, E (2008) Adverse physical effects of alcohol misuse. *Advances in Psychiatric Treatment*. (14), 139-151
- EASL Hepatitis C Guidelines 2016: <http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/easl-recommendations-on-treatment-of-hepatitis-c-2016>
- Kumar P and Clark M (2009) *Clinical Medicine*. 7th edn. London: Elsevier
- NICE (2004) *Hepatitis C - pegylated interferons, ribavirin and alpha interferon* (NICE technology appraisal, TA75) <http://guidance.nice.org.uk/TA75>  
This guidance replaces Hepatitis C - alpha interferon and ribavirin (TA14). This guidance is extended by Hepatitis C - peginterferon alfa and ribavirin (TA106). <http://guidance.nice.org.uk/TA75>
- NICE (2006) *Hepatitis B (chronic) - adefovir dipivoxil and pegylated interferon alpha-2a* (NICE technology appraisal, TA96) <http://guidance.nice.org.uk/TA96>  
This guidance has been partially updated by CG165 Hepatitis B (chronic)
- NICE (2013) *Hepatitis B (chronic): Diagnosis and management of chronic hepatitis B in children, young people and adults* <http://www.nice.org.uk/guidance/cg165>
- Public Health England. Health Protection Report II (26) July 28 2017. Hepatitis C in the UK Annuals Report <https://www.gov.uk/government/publications/health-protection-report-volumell-2017/hpr-volume-ii-issue-26-news-28-july>

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