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The COVID-19 pandemic: A unique opportunity to re-evaluate liver disease care

Graham R Foster (UK)
Ivan Gardini (Italy)
Disclosures

Graham R Foster

- Speaker and consultancy fees from AbbVie, Gilead Sciences, GlaxoSmithKline, Merck Sharp & Dohme, Shionogi, Springbank

Ivan Gardini

- EpaC Onlus has received grants from Gilead Sciences, AbbVie, AlfaSigma, Intercept and Merck Sharp & Dohme
The COVID-19 pandemic: A unique opportunity to re-evaluate liver disease care

Graham R Foster
Professor of Hepatology
Queen Mary, University of London
A new virus in the mix: A huge global impact

Dec 2019–Aug 2020

~22 million cases globally*

*As of 20 August 2020.
A population with liver disease/cirrhosis at direct increased risk

1.5 billion people were estimated to have chronic liver diseases in 2017

Major outcomes in patients with chronic liver disease

<table>
<thead>
<tr>
<th></th>
<th>Non-cirrhotic (n=372)</th>
<th>Cirrhosis (n=425)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive care admission</td>
<td>68 (18%)</td>
<td>117 (28%)</td>
</tr>
<tr>
<td>Invasive ventilation</td>
<td>64 (17%)</td>
<td>79 (19%)</td>
</tr>
<tr>
<td>Death</td>
<td>27 (7%)</td>
<td>137 (32%)</td>
</tr>
</tbody>
</table>

Cirrhosis/COVID-19 registry data (14 July 2020)

Available at: https://www.covid-hep.net/updates.html (accessed August 2020)
A population with liver disease/cirrhosis at indirect increased risk

1.5 billion people were estimated to have chronic liver diseases in 2017¹

Exacerbated by COVID-19

Alcohol

Late presentation of HCC


HCC: hepatocellular carcinoma
Are real-world observations a sign of things to come?

Number of cancer cases* per week

Unpublished data courtesy of Marc Bourlière

*Malignancies of all types (including breast, lung, renal, liver)
A change to liver disease care

Lockdowns and interim changes to healthcare services were implemented to increase capacity for COVID-19 and to help flatten the curve

- **Patient fear**
  - No intervention

- **Closures**
  - Primary care settings/GP clinics
  - Harm reduction centres

- **Cancelled, delayed or postponed procedures**
  - Blood draws
  - Liver transplantation
  - Liver biopsy
  - Endoscopy
  - HCC surveillance

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A change to liver disease care

Lockdowns and interim changes to healthcare services were implemented to increase capacity for COVID-19 and to help flatten the curve.

What will be the immediate impact of these factors on liver disease services beyond COVID-19?

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Time since first case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary care settings/GP clinics</td>
<td></td>
</tr>
<tr>
<td>Harm reduction centres</td>
<td></td>
</tr>
<tr>
<td>Closures</td>
<td></td>
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<tr>
<td>Blood draws</td>
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<td>Liver transplantation</td>
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<tr>
<td>Liver biopsy</td>
<td></td>
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<tr>
<td>Endoscopy</td>
<td></td>
</tr>
<tr>
<td>HCC surveillance</td>
<td></td>
</tr>
</tbody>
</table>

In-patient hospital care: The long-term impact of COVID-19 on hospital care is not yet clear

The impact of COVID-19 on liver mortality remains unclear

Anecdotes of .....
- Late presentation of disease (particularly alcohol)
- Severe malnutrition
- Advanced malignancy

BUT....

Service reconfiguration to deal with COVID-19 and increased ITU/HDU capacity has led to revised ways of working
Out-patient services will need to be reconfigured to allow safe care to resume

- Consider assessment tools used – TE vs NITs
- Decentralise blood tests and imaging procedures
- Embed telemedicine/telehealth
- Prioritise visits – review clinic backlog and schedule patients based on disease severity and clinical need
  - Simplify assessments
  - Increase capacity
  - Minimise exposure to COVID-19
  - HCC screening

NIT: noninvasive test; TE: transient elastography
Out-patient models of care

**CURRENT**

- **GP referral**
- **Community referrals**
- **Consultant referral**
- **Ward discharge**
- **Emergency referral**

**NEW**

- **GP referral** (urgent and routine)
- **Community referral**
- **Consultant referral**
- **Ward discharge**
- **Emergency referral**

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**GP referral**

**Community referrals**

**Consultant referral**

**Ward discharge**

**Emergency referral**

**Choose and book/electronic referral**

**Seen in OPD**

**ED attendance**

**Blood test at hospital**

**FibroScan appointment at hospital**

**Scan appointment at hospital**

**Treatment assessment clinic**

**Reviewed in clinic with results**

**Discharged**

**Speciality clinic**

**General liver clinic**

**Discharged**

**Virtual by default (option for F2F if needed, estimate 30%)**

**One-stop clinic**

**Consultant review**

**Return to GP with advice and guidance**

**Advise additional test and re-refer**

**Discharged**

**Hot clinic**

**Ultrasound scan**

**Jaundice pathway**

**Ambulatory liver**

**Consultant review**

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**ED**: emergency department; **F2F**: face-to-face; **OPD**: outpatient department

Foster G, personal communication
Out-patient models of care

**CURRENT**

- Multiple entry systems
  - Trust specific
  - Origin specific

- GP referral
  - (urgent and routine)
- Community referral
- Consultant referral
- Ward discharge
- Emergency referral

**NEW**

- Single point of access

- GP referral
- Community referral
- Consultant referral
- Ward discharge
- Emergency referral

**Multiple contacts prior to decision**

- Established diagnosis
- Established diagnosis

- Daily consultant triage
- Referral portal
- Referral template
- Letter / Email

- return to GP with advice

- One stop clinic
  - Consultant review
- Hot clinic
  - Ultrasound scan
  - Jaundice pathway
  - Ambulatory liver

- Cerner (phone for emergencies)

**All consultations F2F**

- Virtual by default (option for F2F if needed, estimate 30%)

**Streamlined decision making**

- Reduced unnecessary F2F encounters

**Specialty clinic**

**Trust specific**

**Origin specific**

**ED**: emergency department; **F2F**: face-to-face; **OPD**: outpatient department

Foster G, personal communication
Outreach services will need to regain lost ground

Maintaining momentum in screening and linkage to care activities – think outside the box!

WHO: World Health Organization
Outreach services will need to regain lost ground

**London**
- 1300 people who are homeless
- Housed in hotels and given a phone

**All** being tested and treated for HCV

London outreach over 6 weeks

<table>
<thead>
<tr>
<th>Hotel testing events</th>
<th>Tests</th>
<th>HCV Ab+</th>
<th>HCV RNA+</th>
<th>Treatment start on day</th>
<th>HIV+</th>
<th>HBV+</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td>516</td>
<td>41</td>
<td>24</td>
<td>11</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

Ab: antibody; RNA: ribonucleic acid

Personal communication, Rachel Halford; Data courtesy of The Hepatitis C Trust
Re-configuring liver disease care

Ivan Gardini
President of EpaC Onlus, Italy
Re-configuring liver disease care

**Challenge**
Which services can be deferred?
Which services cannot be deferred/must be carried out without delay?

**Solution**
- EASL recommendations
- Local scientific societies
- Local patient organisations
- Policymakers (National, Regional, Local)

Decisions made solely by policymakers could lead to fragmentation.

Once it has been established which services are deferrable, it will be easier to determine:
- Which services can (or must) be transferred to other locations (outside the hospital)
- What tools could be used to help deliver health services (e.g. telemedicine)
  - Each country will have to adopt different tools and methods that are compatible with their local healthcare system
- Where patient organisations can carry out appropriate advocacy activities

**Next steps**
Gardini I, personal perspective

EASL: European Association for the Study of the Liver
Re-configuring liver disease care

In June 2020, EASL, in collaboration with ESCMID, released a position paper on the care of patients with liver disease during the COVID-19 pandemic.

This position paper aimed to:
- Define prioritisation criteria for outpatient care
- Provide specific considerations for different patient cohorts

An update was published in August 2020 which provided some recommendations for returning to routine care.


ESCMID: European Society of Clinical Microbiology and Infectious Diseases
A new virus in the mix:  
A chance to re-imagine liver disease care

We are in a unique position to re-evaluate liver disease care

The liver disease community has responded quickly

Should we return to the status quo?

But remember: a ‘one size’ approach will not fit all

We must be prepared for a second peak...