Treating Hepatitis C in Injecting Drug Users

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Treating HCV in Drug Users

- Why bother?
- Why we should not treat injectors
- Current practice
Treating HCV in Drug Users

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- Current practice
Treating HCV in Drug Users

- Why bother?
  - Because that is where the virus is
Treating HCV in Drug Users

• Why bother?
  – Because that is where the virus is
  – Because they are diagnosed
Incidence of hepatitis C

• Estimates of annual incidence in IDUs
  – Estimates of around 3-6% per year
  – However, was 42% in one London study
• Difficult to quantify
  – Main on-going transmission is in IDUs
• Estimates of the size of the current IDU population
  – 100,000-120,000
  – turnover / length of injecting uncertain
• could amount to 6,000 infections per year
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Treating HCV in Drug Users

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  – Because they pass it on to others
Early Therapy for HCV – *Effects of Age and SVR*

(Data from patients treated with 40 KD PEG IFNα2a and Ribavirin)

- Early treatment for HCV is more effective
- Most ‘early’ infections are found in active drug users

Treating HCV in Drug Users

• Why bother?
  – Because that is where the virus is
  – Because they are diagnosed
  – Because they pass it on to others
  – Because it is easy to treat
Treating HCV in Drug Users

- Why bother?
- Why we should not treat injectors
- Current practice
Why we should not treat injectors

- They are not interested
Drug users are not interested in therapy

East London study (Foster et al AP&T – in press)

- 441 patients known to be HCV RNA +ve
- 83 considered therapy (18.8%)
- 58 received therapy (13%)
Drug users are not interested in therapy

Nottingham study (Irving et al JVH 2006;13:264-71)

- 256 diagnosed patients
- 125 patients referred
- 26 received therapy (10%)
Why we should not treat injectors

- They are not interested
- They will not comply
Treatment Adherence and SVR

Good evidence that treatment (in conjunction with support and guidance) works in active and previous injectors:

**ADHERENCE:** No increased risk for IFN-alfa induced mental side effects or dropouts

**SVR:** No significant diff. vs. non-DU (control)

<table>
<thead>
<tr>
<th>Treatment Type</th>
<th>SVR (%)</th>
<th>Dropouts (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex DUs</td>
<td>28%</td>
<td>43%</td>
</tr>
<tr>
<td>Methadone</td>
<td>38%</td>
<td>48%</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>35%</td>
<td>14%</td>
</tr>
<tr>
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</table>

N=21 N=21 N=16 N=23

Further main data:
- Schaefer et al, Hepatology, German study, Feb 03
- Australian study: Hallinan et al, Drug and Alcohol Dependence, Sept 2006
- Swiss study: Bruggmann P et al, Poster, EASL 2008
Why we should not treat injectors

- They are not interested
- They will not comply
- They will re-infect themselves
Re-infection

Treatment of chronic hepatitis C in injecting drug users: 5 years' follow-up.

Aim of the Study:
To assess the long-term HCV treatment outcome in former IDUs.
27 former IDUs represented all IDUs who had obtained a SVR.

Results:
Only one case of probable re-infection was seen among the 27 IUDs.

1. Dalgard et al, Jan 02
Why we should not treat injectors

- They are not interested
- They will not comply
- They will re-infect themselves

None of the arguments are evidence based
Treating HCV in Drug Users

• Why bother?
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• Current practice
Treating Injectors around the world

AASLD 2008

• Unofficial symposium on treating injectors
The Swiss Model

Bruggman et al

• Specialised, integrated service
  – 5 psychiatrists, 3 psychologists, 3 ID physicians
• Directly observed therapy
The Swiss Model

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- 500 patients (199 injectors, 301 non-injectors)
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SVR

- No difference between injectors (69.3%) and non-injectors (59.8%)
The US model (Cornell)

Carden et al

- Community based, needle exchange program
- Multidisciplinary team
- Heroin and/or cocaine within 30 days
The US model (Cornell)

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- 18 considered therapy, 9 started Rx
- 56% SVR
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- Multidisciplinary team
- Heroin and/or coccaine within 30 days
- 18 considered therapy, 9 started Rx
- 56% SVR
- Significant reduction in drug use
Key lessons

All the successful projects have two key features:-

• 1 Multidisciplinary team
• 2 Treatment near to the patient
UK Experience – *Current Practice*

2 leading models of care:

- Mile End, London
- Windmill, Nottingham
Treating Injectors in London

• The Royal London began offering treatment to injectors in 2003

• Very few patients attended the hospital clinic

• In 2005 we set up a clinic in the local Specialist Addiction Unit
Treating injectors in the community

East London services for drug users

Central Blood Borne Virus Team
(Psychiatrist available)
Outreach Clinics
GP surgery
Treating injectors in the community

East London services for drug users

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Experienced nurses –
Treating injectors in the community

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Experienced nurses – general training,
Treating injectors in the community

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Experienced nurses – general training, multi-skilled,
Treating injectors in the community

East London services for drug users

Central Blood Borne Virus Team
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Experienced nurses – general training, multi-skilled, empowered
Treating injectors in the community

• Patients who attend one of the out-reach clinics are offered HCV testing

• If positive they are offered a visit to a doctor to discuss therapy

• If they decline the offer is repeated
Treating injectors in the community

• Patients who test positive for HCV and want therapy come to a central clinic (SAU)

• Central clinic runs once a month (consultant and senior nurse)

• Instant decision on therapy
Patients attending the SAU Liver clinic
N= 83

No therapy
N=20

- Medically unfit for therapy
  N=6

- Considered therapy and declined to start
  N=14

Agreed to start therapy
N=63

- Completed therapy
  N= 58
  (60 treatment episodes)

- Therapy on-going
  N= 5
Patients attending the SAU Liver clinic
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Patients Attending E. London SAU
Treating Injectors - Response

Completed therapy
N= 58
(60 treatment episodes)

Compliant with therapy
N=47
(48 treatment episodes)

Completed follow up
N=36
(37 treatment episodes)

SVR
n = 21 (57%)
(7 geno 1,
14 non-1)

No SVR
n = 16 (43%)
(9 genot 1,
7 non-1)

Non-compliant
N=11
(12 treatment episodes)

Completed follow up
N=11
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SVR
n = 4 (33%)
(3 geno 1,
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No SVR
n = 8 (67%)
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Treating Injectors

OVERALL:-

• 80% of patients completed therapy

• 51% achieved an SVR

• 57% of compliant patients achieved an SVR
Treating Injectors

• Can we identify factors that reduce compliance?
Factors associated with non-compliance

$P = 0.073$
Factors associated with non-compliance

P=0.047
Factors associated with non-compliance
Factors associated with non-compliance

P = 0.48
Factors associated with non-compliance

P = 0.37
Factors associated with non-compliance

P=0.024
Factors associated with non-compliance

- Homeless
- Single
- Anti-depressant
- Injecting
- Heroin
- Crack and heroin
- Daily drug use

P = 0.644
Factors associated with non-compliance

P = 0.23
Factors associated with non-compliance

P=1
Factors associated with non-compliance
Factors associated with non-compliance

NO SIGNIFICANT DIFFERENCE BY MULTIVARIABLE ANALYSIS
Treating injectors in East London

• We are getting bolder....
Treating Drinkers

Drug using alcoholics consuming >100 units per week

![Graph showing SVR and Discontinued (Side effects) with 4 of 8 in SVR and 2 of 8 in Discontinued.](image)
Treating injectors in East London

• We are getting bolder....

• BUT – care is still needed
  (Two patients admitted with psychotic episodes)
Other approaches

• Successful treatment center in Nottingham focussed on a GP surgery

• Successful service in Cornwall in a GP surgery
Conclusion – *Treating Injectors*

- We can successfully treat injectors – with good compliance and good SVR rates
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- However…. 
Conclusion – *Treating Injectors*

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- However….  

- A multidisciplinary approach is essential