HEPATITIS C TREATMENT: COST AND EFFECTIVENESS

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BACKGROUND

Hepatitis C virus (HCV) infection is one of chronic liver disease major causes. Due to HCV infection prevalence in European Regions (1.5%)\(^1\), there has been increasing health expenditure in order to HCV eradication.

PURPOSE

Assess cost, effectiveness and safety of treated HCV patients with pegylated interferon-ribavirin (IFN-RIB) compared to new direct acting antivirals (DAA).

MATERIAL and METHODS

Retrospective observational comparative study of two cohort of patients including HCV patients who started and finished treatments with IFN-RIB in 2011 (except above 12 months) and with DAAs in 2017. Exclusion criteria: deaths, no therapeutic adherence and transfer to another hospital. Data were extracted from electronic records.

RESULTS

<table>
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<tr>
<th>49 patients</th>
<th>185 patients</th>
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<td><strong>2011</strong></td>
<td><strong>2017</strong></td>
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<tr>
<td>87.8% male</td>
<td>75.0% male</td>
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<tr>
<td>44.4±7.1 years</td>
<td>52.2±9.9 years</td>
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<tr>
<td>40.8% co-infected</td>
<td>28.1% co-infected</td>
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<td>51.0% genotype 1</td>
<td>64.9% genotype 1</td>
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<td>12.2% were previously treated</td>
<td>11.4% were previously treated (4 with DAA)</td>
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73.5% were treated with IFNα2a-RIB and remaining with IFNα2b-RIB

79.3% patients had severe or moderate fibrosis (FD≥2).

Comparing treatments of two cohort patients (IFN-RIB/DAA)

- **IFN-RIB**
  - Average treatment: 8.1 months/patient
  - 70.4% 12 weeks length
  - 36.7% treatments were discontinued:
    - Serious adverse reactions
    - Patients non-responders

- **DAA**
  - Average treatment: 3.5 months/patient
  - Fewer and lower severity adverse reactions
  - 0% treatments were discontinued

- **4287,7€/patient**

- **53.1% success rate**

- **23/49 patients were posteriorly treated with DAA**

- **14867,1€/patient**

- **96.8% success rate**

- **2018 prices of treatment/patient are half of 2017**

Incremental Cost-Effectiveness Ratio (DAA/IFN-RBV) 238,1€/patient successfully treated

CONCLUSION

DAAs treatments have higher effectiveness against HCV infection (>95%), treatments are shorter, more effective and safer than older therapies, despite higher costs.

REFERENCES