International Round-table meeting
«Prevention and control of Viral Hepatitis in the Russian Federation: lessons learnt and the way forward»

Epidemiology and burden of viral hepatitis in the Republic of Sakha (Yakutia)

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Incidence (reported cases) of chronic viral hepatitis in Russia and Sakha Republic (Yakutia), 1999 - 2017

per 100,000 population
Incidence (reported cases) of chronic hepatitis B and C in Sakha Republic (Yakutia), 2000 - 2017

Per 100,000 population

CHB

CHC
Incidence (reported cases) of chronic viral hepatitis in Sakha Republic (Yakutia) compared to Russia and Far East Federal District, 2015 -2017

Chronic viral hepatitis

- 2015: 89.66%
- 2016: 89.22%
- 2017: 86.24%

RF | FEFD | SR
---|---|---
2015 | | |
2016 | | |
2017 | | |

CHB

- 2015: 35.15%
- 2016: 37.15%
- 2017: 34.12%

RF | FEFD | SR
---|---|---
2015 | | |
2016 | | |
2017 | | |

CHC

- 2015: 54.19%
- 2016: 51.13%
- 2017: 52.12%

RF | FEFD | SR
---|---|---
2015 | | |
2016 | | |
2017 | | |

HBV inactive carriers

- 2015: 17.47%
- 2016: 16.91%
- 2017: 15.08%

RF | FEFD | SR
---|---|---
2015 | | |
2016 | | |
2017 | | |
Incidence of HCC in Russia and Sakha Republic (Yakutia), 2006 - 2015 (per 100 000 population)
The Registry of patients with chronic viral hepatitis in Sakha Republic (Yakutia)

Total number of patients with CH - 15145

- HBV carriers 177
- CHB 6417
- CHD 1101
- CHC 6781
- MIXT 641

- Total: LC - 385
- HCC - 27

hepreg.ru - 55 physicians routinely work in the registry in SR
Incidence (reported cases) of CHB, CHC, CHD and their outcomes (LC, HCC) in medico-geographical zones of SR (Y)

The period of development of HCC in patients with active viral replication
### Viral Hepatitis Mortality (in abs. numbers)

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<td>9</td>
<td>8</td>
<td>19</td>
<td>7</td>
<td>11</td>
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<td>Total</td>
<td>61</td>
<td>78</td>
<td>97</td>
<td>79</td>
<td>63</td>
<td>94</td>
<td>85</td>
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Given the high prevalence of chronic viral hepatitis B, C and D, the number of patients with liver cirrhosis of viral etiology in the waiting lists for liver transplants is steadily increasing.
Levels of health care

- Infectious Disease Surgery in Regional Centers and City Polyclinics - 30 Surgeries
- Infectious Disease Beds at Regional Central Hospitals – 167 Beds
- Infectious Disease Department at the Multi-Specialty Hospital (Yakutsk City Clinical Hospital) - 50 Beds
- Hi Tech Medical Procedures Provided by the National Center of Medicine #1

Executive Order MH RSY #01-8/4-2166 of 12.12.2012 г. On Dispensary Follow-Up of Patients with ChHBV/HCV/HDV.
EO MH RSY #01-8/9-272 of 20.05.2008 г. On Monitoring the Hi Tech Medical Procedure Waiting List in RSY.
Chronic Viral Hepatitis AVT provided in 2012-2017

- 1. Republican program - 708 patients
- 2. Supplementary drug supply benefits (disabled) – 158 patients
- 3. Other sources – 147 patients
- TOTAL treated for 6 лет - 1013, or 6.7% of the chHV patients total in RSY.
Liver transplantation preparation algorithm

**Tier I**
GP, infectious disease doctor at ID surgery, internist

Family outreach, chHV case detection and patient contacts

Healthy persons: contact and family screening, HBV/HDV immunization status, incl. anti-HB AB evaluation.

ChHV patients: risk group screening (ChHBV/HCV/HDV) – liver USI, AFP test, AVT record, if any.

Suspected liver neoplasm or cirrhosis diagnosis (B,C class Child-Turcott-Pugh, MELD)

Evaluation of objective and instrumental data (CT, MRI, angiography)
Tier II
Peer review (infectious doctor, oncologist, surgeon, internist, GIT doctor)

Comprehensive screening to determine treatment regimen (AVT, chemotherapy, etc…), oesophageal varices ligation, indications to liver transplantation, based on USI and Milan criteria

Tier III
Putting on waiting list and LT preparation at republican and federal levels

Donor selection for possible related liver transplantation; ambulatory follow-up at the city clinic, contracted for LT; admission to respective hospital, if required

Waiting period for cadaveric LT. Donor selection, pre-operative preparations, viremia test, AVT and treatment of concomitant infections
Tier IV
LIVER TRANSPLANTATION
Use of HB Ig for HBV/HDV

Tier V
Post-transplantation period

Follow-up, AVT selection and adjustment, immunosuppressant therapy
• Set up mobile outreach teams with screening labs (HV markers, risk group testing).
• Health institution informatisation; developing telemedicine for remote care provision to RSY districts and expert consultations.
• Community and risk group health education (media, patient’s schools, OPEnc lectures)/
• Physician continuous education; health worker training course; students’ Olympics (academic competition).
Professional Education

- Annual republican hepato-schools (17 years)
- ChHV patient schools
- Elective training courses for students (medical schools, training centers, OPEN lectures, media).
- Academic competitions for students
Republican hepatology center in Yakutsk, including inter-district branches

- Set up mobile outreach teams with mini-labs (district community and risk group screening).
- Establish a liver cancer prophylaxis and treatment surgery.
- Promote telemedicine for remote services to RSY districts and national leading expert advice.
- Establish physician continuous education programs for health/community workers, infectious disease physicians, internists, surgeons and OB/GYN.
- Infectious disease physician education.
Thank you!