

Incidences of acute hepatitis D in Mongolia

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Introduction: Updates on the incidence of and risk factors for acute hepatitis delta virus infection in Mongolia are lacking. Therefore, our aim was to determine prevalence of acute HDV incidences among acute hepatitis B patients attending to the National Center for Communicable Disease of Mongolia.

Methods: We conducted a retrospective study to review records for all acute HBV cases admitted between 2010-2014 at the National Center for Communicable Disease of Mongolia. All data were analysed using MS Excel and SPSS 20 programs.

Results: A total of 2562 patients were admitted to the National Center for Communicable Disease of Mongolia due to acute hepatitis B over the last 5 years (Table 1).

| Year | Total acute HBV incidences | Total acute HDV incidences | Acute HDV distribution by age group Anti-HDV, n/% | | | | | | | | | |
|-------|----------------------------|----------------------------|---|-------|--------|---------|----------|----------|---------|--------|--------|-------|
| | | | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |
| 2010 | 479 | 122 | 1/0.8 | | 3/2.4 | 13/10.6 | 44/36.0 | 34/27.8 | 17/14 | 4/3.2 | 5/4.0 | 1/0.8 |
| 2011 | 421 | 155 | 1/0.6 | 2/1.3 | 3/1.9 | 8/5.1 | 79/51 | 36/23.2 | 16/10.3 | 8/5.1 | 1/0.6 | 1/0.6 |
| 2012 | 340 | 142 | 3/2.1 | 2/1.4 | 2/1.4 | 5/3.5 | 54/38.0 | 44/31 | 14/9.8 | 8/5.6 | 7/4.9 | 3/2.1 |
| 2013 | 319 | 174 | 6/3.4 | | 42/3 | 13/7.4 | 75/43.1 | 44/25.2 | 19/11 | 8/4.6 | 4/2.3 | 1/0.5 |
| 2014 | 284 | 126 | 3/2.3 | 3/2.4 | 4/3.1 | 9/7.1 | 53/42.0 | 23/18.2 | 16/12.6 | 7/5.5 | 6/4.7 | 2/1.6 |
| Total | 2562 | 719 | 14/1.9 | 7/0.9 | 16/2.2 | 48/6.7 | 305/42.4 | 181/25.1 | 82/11.4 | 35/4.8 | 23/3.1 | 8/1.1 |

As shown in Table 1, 28% (719) of all HBsAg positive patients were tested positive for anti-HDV indicating high prevalence of acute hepatitis D. Majority were 20-24 (42.4%) and 25-29 years old (25.1%), especially 21(15%), 22(13.4%), 23(11.1%), 24(13.8%), and 25 (11.7%) years old youths. No apparent risk factors of HDV transmission were identified for 94.9% of patients.

Conclusion: Incidences of acute HDV infection among the Mongolian population is high, especially those 20-29 years old population. It clearly demonstrates that more work needs to be done to prevent new HBV/HDV infections.