

Current overview on the hepatitis D in Georgia

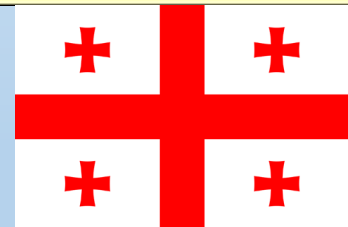
VIRAL HEPATITIS PREVENTION BOARD
TECHNICAL MEETING

The changing context of Hepatitis Delta
28-29 October 2021

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Georgia

- Georgia is located at the crossroads of Western Asia and Eastern Europe, it is bounded to the West by the Black Sea, to the North by Russia, to the South by Turkey and Armenia, and to the Southeast by Azerbaijan.



- Georgia is a lower-middle-income country
- Population is about 3.7 million

HBV in Georgia

- 2003 – HBsAg+ among pregnant women 3.1% (7/223)

*D. Metreveli et al. World Congress of Pathology and Laboratory Medicine, Istanbul, Turkey, 2005
Poster 3-198.*

- 2006 – estimated HBsAg+ prevalence among general population 5-7%

CDC yellow book, 2016, https://www.cdc.gov/travel-static/yellowbook/2016/map_3-04.pdf

- 2012 – HBsAg+ 2% and Anti-HBc+ 29% - among healthcare workers

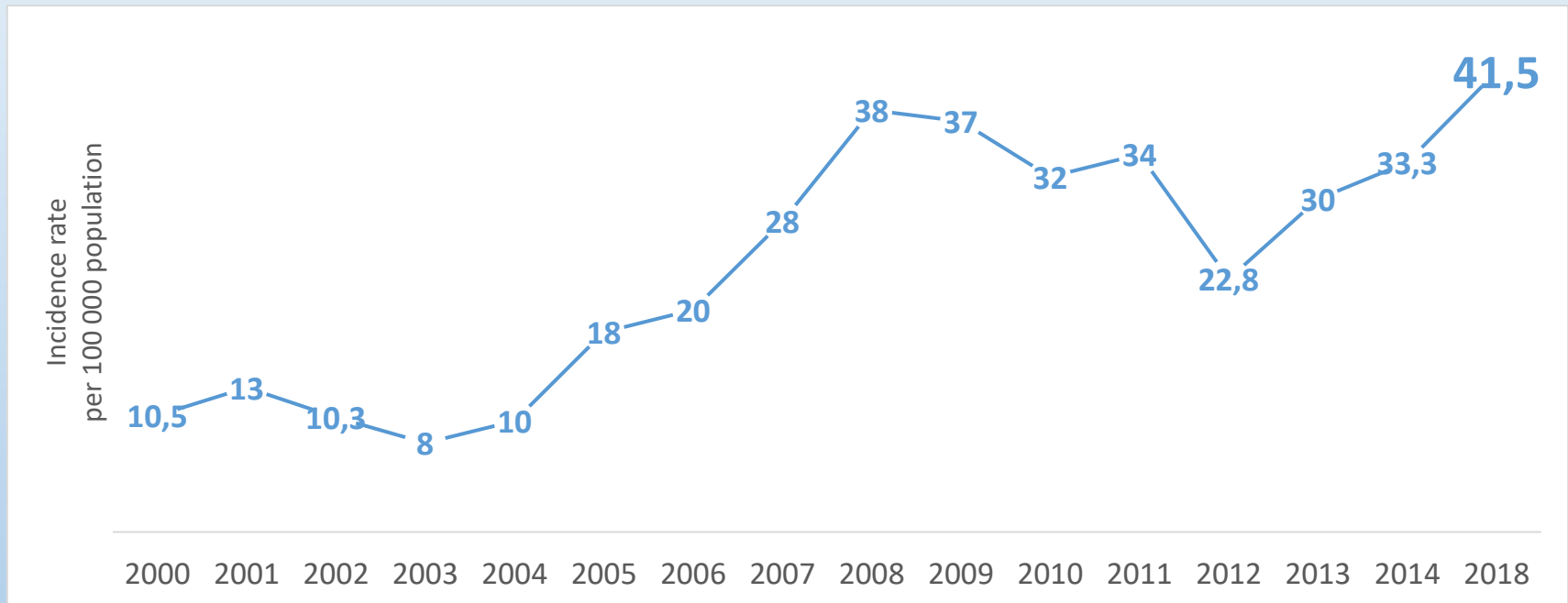
M. Butsashvili et al., Occupational Medicine, Volume 62, Issue 8, Pages 620–626

- 2013 – HBsAg+ among pregnant women – 2.5%

NCDC. statistical yearbook, 2014

HBV in Georgia

The trend of HBV infection incidence rate in Georgia, 2000-2018



In 2018, 30 EU/EEA Member States reported 24 588 cases of HBV infection, corresponding to a crude rate of 6 cases per 100 000 population.

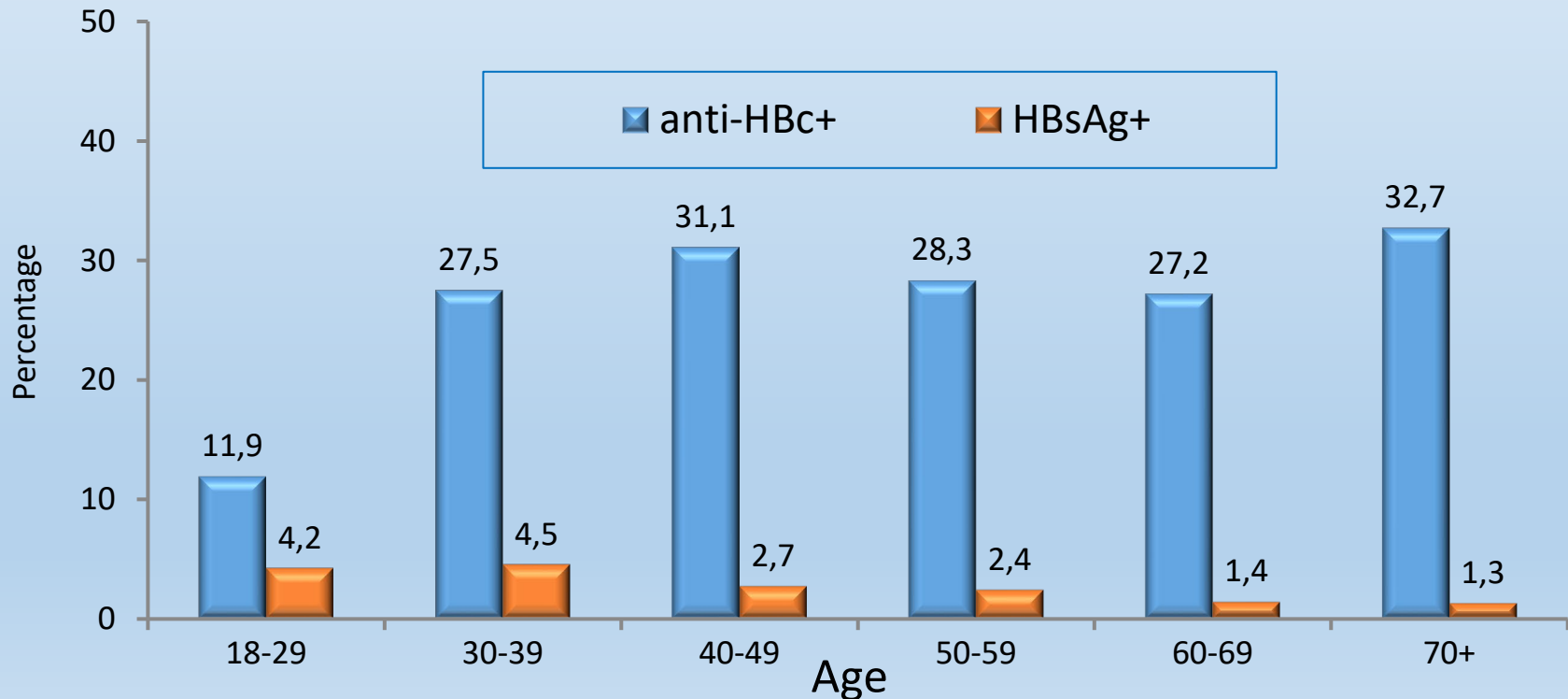
National seroprevalence survey (2015)

- Cross-sectional, nationwide survey for hepatitis B and hepatitis C prevalence among the general population in Georgia
- Samples were chosen using a stratified, multi-stage cluster design with random sampling
- Sample: 7,000 adults, ≥ 18 years of age (born before 1998)

National seroprevalence survey (2015)

Results

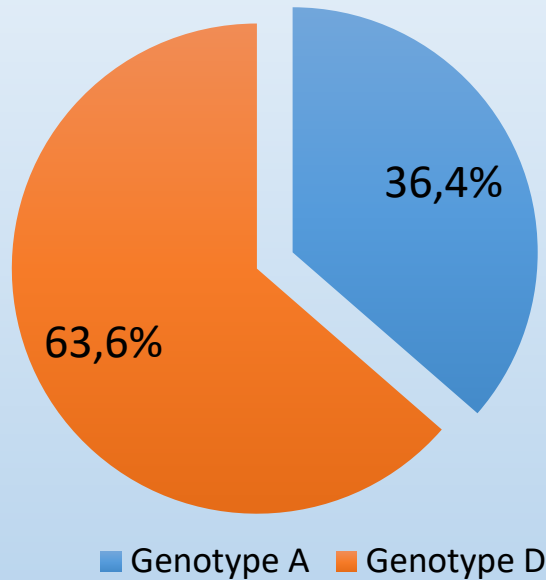
Overall	%	n	95% CI
Anti-HBc+	25.9	1634	24.2 - 27.6
HBsAg+	2.9	188	2.4 - 3.5



National seroprevalence survey (2015)

Results:

HBV genotypes (n=77)



Co-infection:

**HBsAg+ / anti-HCV+
13.3%**

**HBsAg+ / HCV-RNA+
7.5%**

Among HBsAg-positive persons, 0.9% (95% CI = 0.0-2.0) were positive for HDV RNA (n = 4/175 [2.3%] of samples tested).

All HDV specimens were genotype 1

National seroprevalence survey (2015)

Results:

Associated risk factors

Characteristic (anti-HBc+)	OR	95%CI
Ever injecting drugs	2.46	1.64 - 3.69
Ever having a blood transfusion	1.67	1.32 - 2.11
Ever having sex with a commercial sex worker	1.46	1.07 - 2.00
Characteristic (HBsAg)	OR	95%CI
Ever having a blood transfusion	2.72	1.54 - 4.80
Incarceration	2.72	1.25 - 5.93

**Ever injecting drugs was not associated with being HBsAg positive.*

National seroprevalence survey (2015)

Results:

HBV knowledge

- Only 36.7% has ever heard of HBV
- Transmission:
 - Blood 23.3%
 - Sharing needles or syringes 20.6%
 - Sharing household objects like razors 18.7%
- Out of those who had heard of HBV
 - 42.8% were aware that it can be treated
 - 42.5% knew that it could be asymptomatic
- Overall, 1.1% of the surveyed population reported ever having been vaccinated against hepatitis B.

*limitation: It's only based on Self-reporting

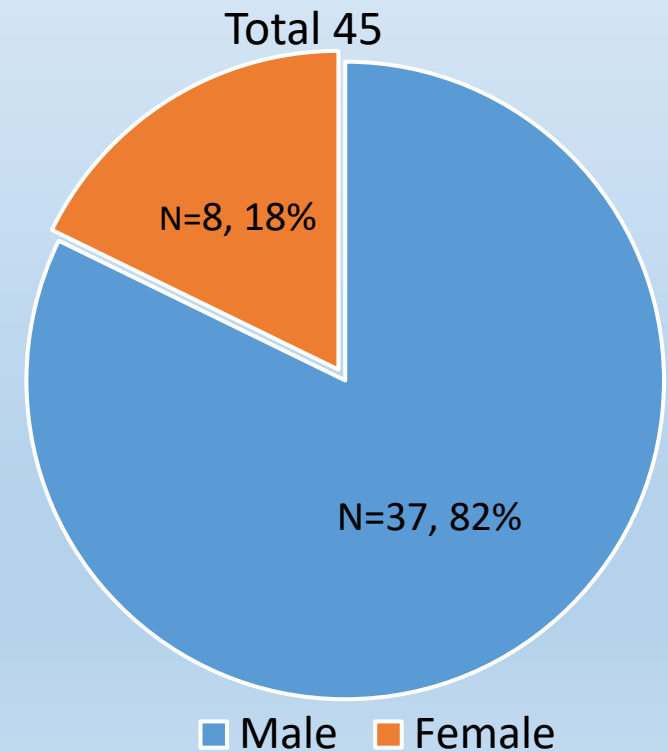
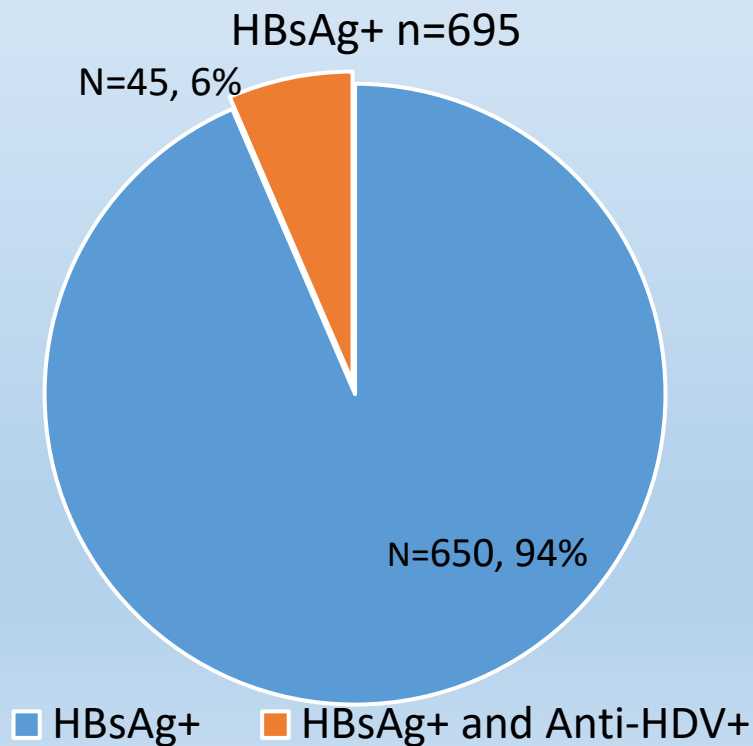
Hepatitis Delta Infection in Georgia

Our Experience

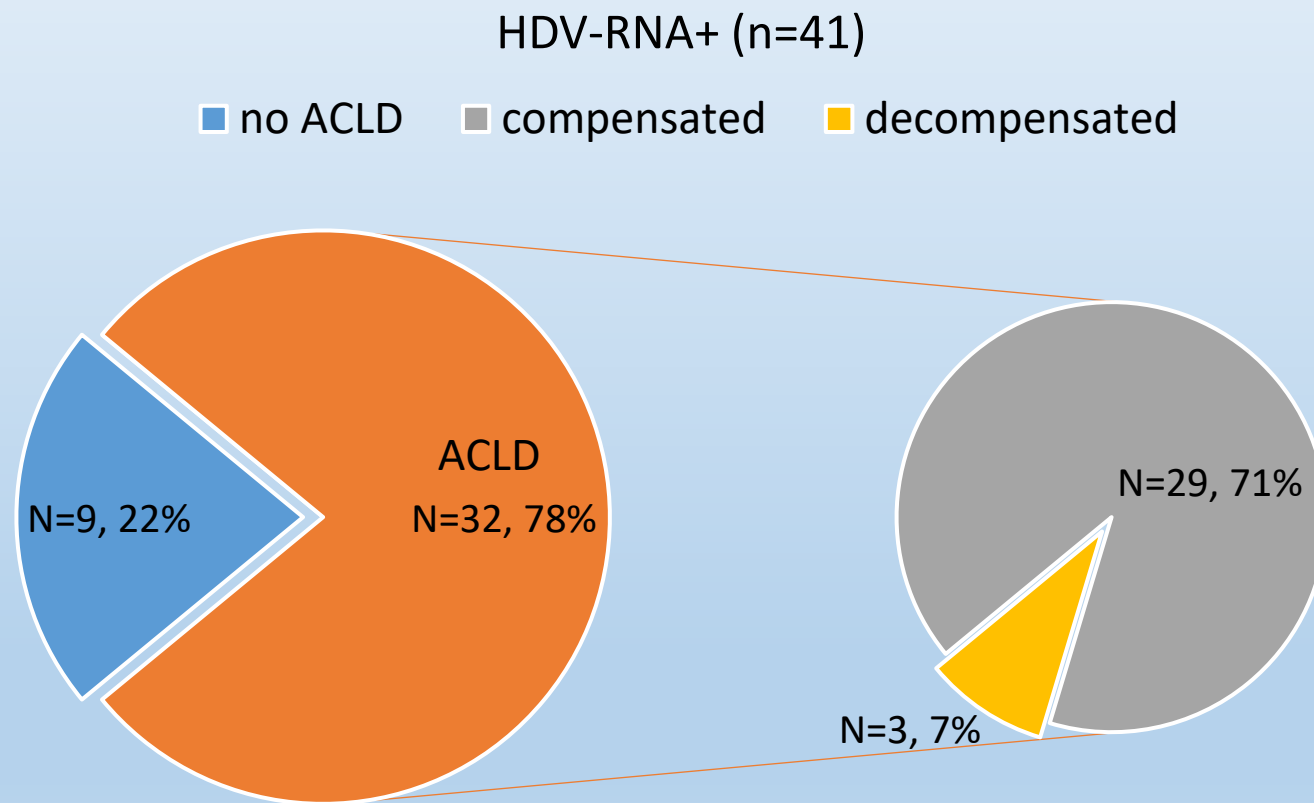
Data from Mrcheveli Medical Center (05.2012-12.2019)

Data were extracted from 755 HBsAg positive patient's medical records
HDV tests were available 695

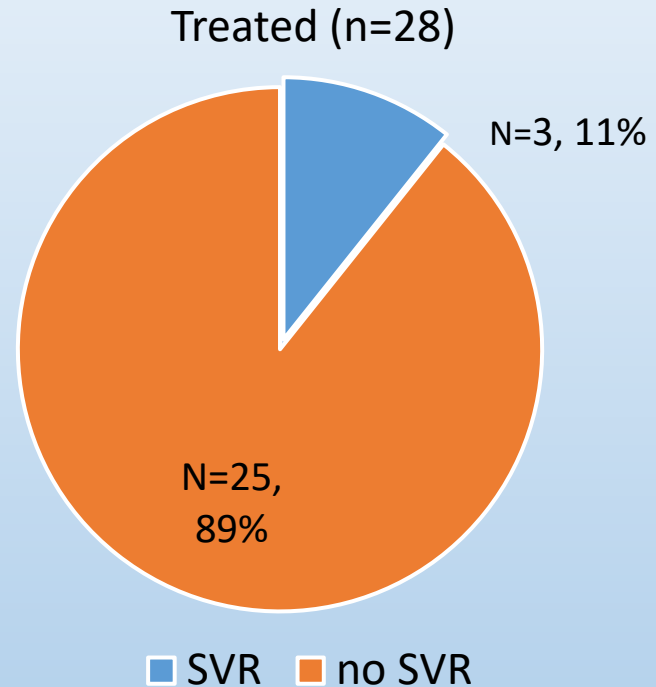
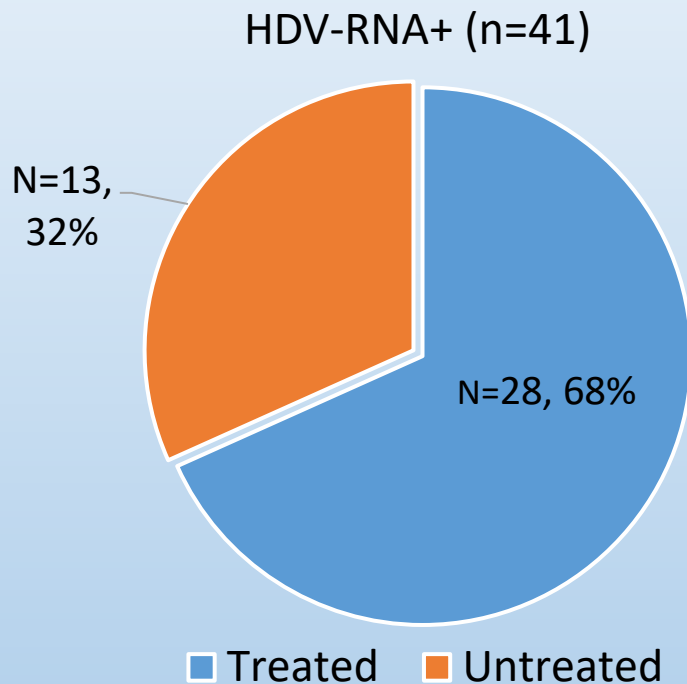
From total 45 Anti-HDV+ person



Data from Mrcheveli Medical Center (05.2012-12.2019)



Data from Mrcheveli Medical Center (05.2012-12.2019)



- All patients were treated with PegIFN, different duration (none of them more than 48 weeks)
- Most patients were untreated, because of the contraindication for treatment (disease severity), treatment cost, or due to mild diseases

Achievements in HBV/HDV in Georgia

1997 – screening of blood and blood products for viral hepatitis

2003 – routine HBV immunization of newborns

2008 – universal HBV screening of pregnant women

2015 – HBV screening and vaccination of all HCV infected persons within the national HCV Elimination program

2016 – mandatory HBV screening for all hospitalized patients

2019 – HBV screening and vaccination of health care workers

During this period every aspects of viral hepatitis care has been gradually improving in the country:

The coverage of HBV screening and vaccination; the knowledge and practices of the doctors; available antivirals; diagnostic tools and their quality

Key challenges in HBV/HDV care

- Insufficient infection control still remains a risk factor of HBV/HDV transmission within healthcare/non-healthcare facilities
- Low awareness about HBV/HDV infection not only in patients but also among healthcare workers
 - Very low rate of HBV vaccination among adults (born before 2003)
- Lack of standardized international HDV management guidelines
 - and even non-compliance to the HBV guidelines by the specialists
- Lack of affordability to the new HDV medications
 - The patients can't afford to buy or to enter into the clinical trials
- There is no financial support neither from national nor from private insurances at any level of chronic HBV/HDV management – diagnostics, surveillance or antiviral treatment

Acknowledgment

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- Center of Disease Control (CDC), United States

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Thank you for your attention!



Svaneti, Georgia

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