

# HCV Infection in Patients with Hereditary Bleeding Disorders



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## Introduction

Unavailability of adequate methods of viral attenuation in the early 1980's led to the transfusion of human blood-derived components from donors infected with Hepatitis C virus (HCV).<sup>1, 2, 3</sup>

Patients with hereditary bleeding disorders (HBDs) treated with human blood-derived components were infected with HCV, around 20% naturally eradicated their HCV infection.<sup>4</sup>

Approximately 80% developed chronic HCV. 10-20% progressed to end-stage liver disease in more than two decades.<sup>4</sup>

One of the major difficulties in monitoring HCV infection is that liver biochemistry and clinical status do not reflect the histology or disease activity.<sup>5</sup>

## Objectives

To define and characterize the subpopulation of HCV infected patients among the population of patients with HBDs followed in our Center.

To study and determine the number, age, gender and treatment modality of HCV infected patients in the subpopulation.

## Methods

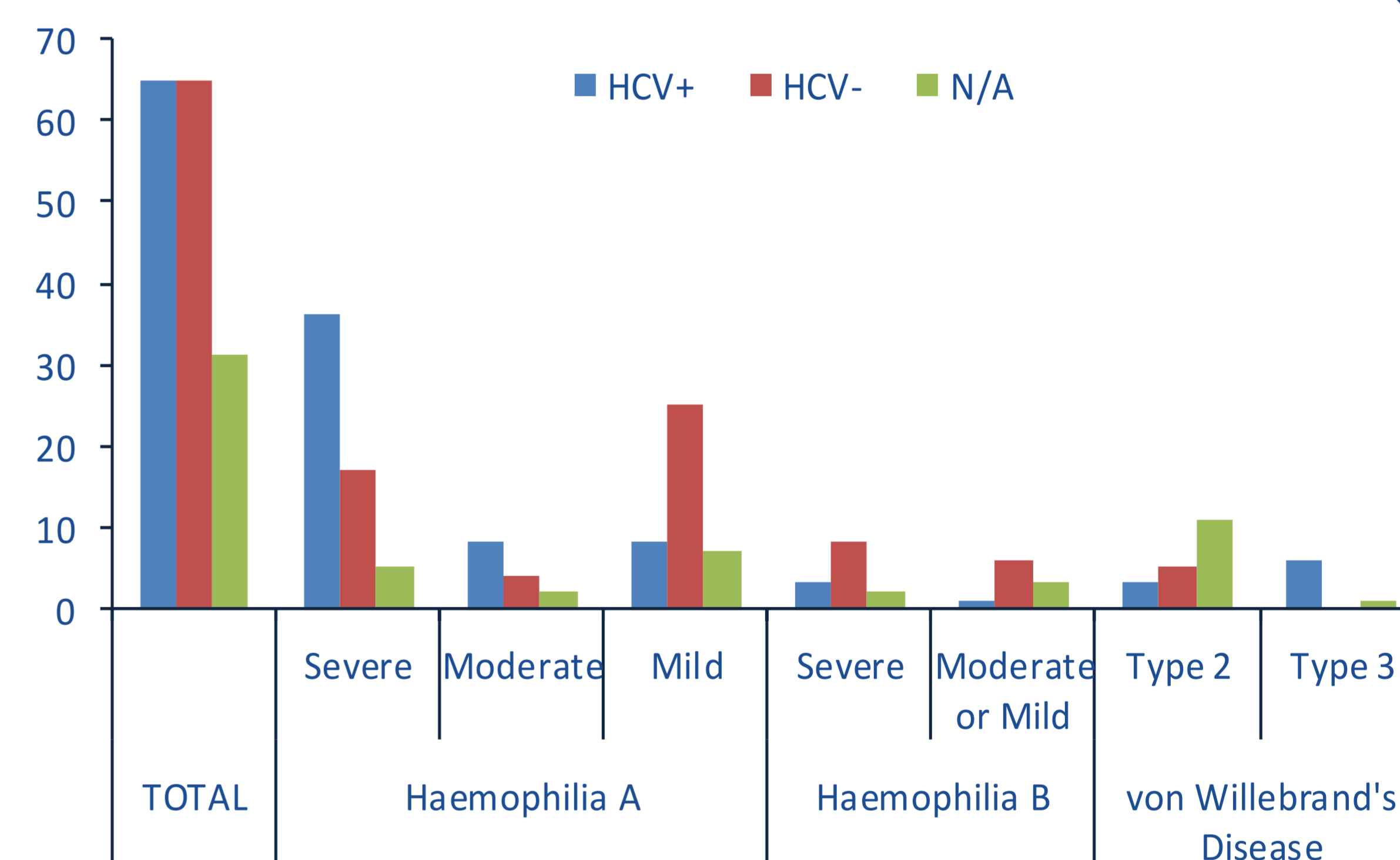
Analysis of a series of 161 patients with HBDs treated in the Haemophilia Center of the Immunohaemotherapy Department of the Centro Hospitalar de Lisboa Central (Lisboa, Portugal).

Systematic review of the patients' clinical data. Collection of the HCV serum markers' evolution for each patient.

Elaboration of a Microsoft® Office Access database comprising the information gathered and statistical study, using Microsoft® Office Excel, of its variables: age, gender, degree of severity of the bleeding disorder, treatment frequency and modality and HCV infection serum markers.

## Results

	Haemophilia A (n=112)			Haemophilia B (n=23)		von Willebrand's Disease (n=26)	
	Severe	Moderate	Mild	Severe	Moderate or Mild	Type 2	Type 3
<b>Number of patients (n=161)</b>	58	14	40	13	10	19	7
	36%	9%	25%	8%	6%	12%	4%
<b>Age (years)</b>	41,0	35,6	42,3	36,1	53,6	53,0	43,0
	± 14,4	± 10,0	± 15,2	± 13,6	± 15,3	± 17,7	± 10,7
<b>Gender</b>							
Male	100%	100%	100%	100%	100%	21%	29%
Female	-	-	-	-	-	79%	71%
<b>Treatment frequency</b>							
On demand	38	14	40	10	10	-	-
Prophylactic	20	-	-	3	-	-	-
<b>Treatment modality</b>							
Human blood-derived	34	5	6	11	4	-	-
Recombinant	24	9	34	2	6	-	-
<b>HCV infected</b>							
Positive	36	8	8	3	1	3	6
	62%	57%	20%	23%	10%	16%	86%
Negative	17	4	25	8	6	5	-
	29%	29%	63%	62%	60%	26%	-
Not available	5	2	7	2	3	11	1
	9%	14%	17%	15%	30%	58%	14%



## Conclusions

More than 80% (n=130) of the patients with HBDs followed in our Center have been studied for HCV infection. 40% (n=65) are infected.

Considering that most patients were infected in the late 70s and early 80s and the natural evolution of HCV infection in patients without HBDs, it is expected that the prevalence of major complications will rise significantly in the coming years.

In order to be properly attended to, these patients should be identified as forming a subpopulation among the population of patients treated in our Center for HBDs, which is particularly vulnerable if not monitored adequately.

Therefore, this subpopulation requires our utmost attention and careful planning in order to achieve optimum prophylactic management and follow up of the disease and its potentially serious complications.

## References

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