

Educational Workshop



EW14: Elderly and chronic hepatitis C - to treat or not to treat?

Arranged with a group of ESCMID ID members interested in viral hepatitis

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Vince - Elderly with chronic hepatitis C in real-life setting



ELDERLY WITH CHRONIC HEPATITIS C IN REAL-LIFE SETTING


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Outline

- Epidemiology of HCV infection in Croatia
- Characteristics of elderly patients treated at UHID
- PEG-IFN α +RBV treatment response and safety in elderly patients
- Clinical course of HCV infection in elderly patients
- Conclusions

Epidemiology of HCV infection in Croatia



Population: 4,284,889
GDP: 18,314\$ per capita
(6.9% of GDP on healthcare)

HCV prevalence: < %
Estimated chronic HCV+:
39,489
Estimated chronic HCV
infection in elderly:
?????


Vince - Elderly with chronic hepatitis C in real-life setting

University Hospital for Infectious Diseases Zagreb
(Croatian Reference Centre for viral hepatitis)

Department for Viral Hepatitis

Outpatient Clinic:

- 4 ID specialists
- 5,500pts visits/yr
- 500 chronic hep C pts/yr.
- 80-100 new hep C pts/yr.
- 75 pts PEG-IFNα+RBV /yr.



CLINICAL GUIDELINES

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HCV treatment options in Croatia

Croatian Health Insurance Fund
(Criteria for reimbursement)

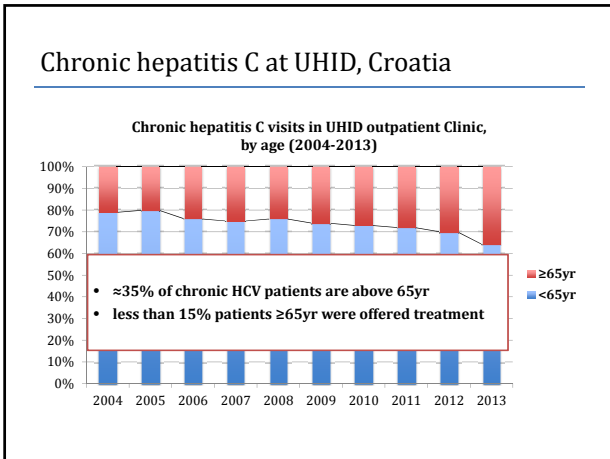
2005-2012
PEG-IFNα+RBV

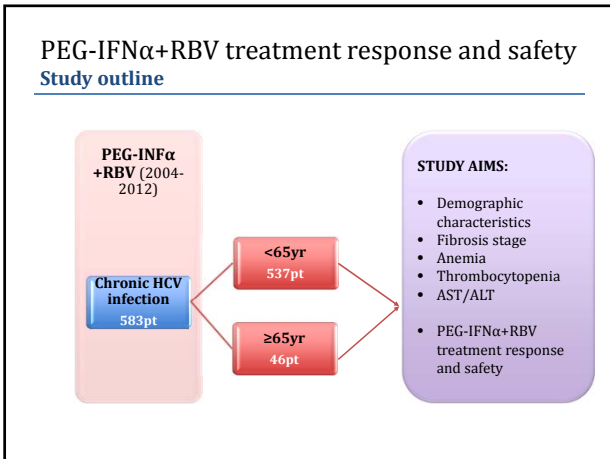
- Treatment available <60yr
- Fibrosis >2 (ISHAK)
- ↑ 2x ALT

>2013
PEG-IFNα+RBV±PI

- <70yr
- Fibrosis >2 (ISHAK)
- Fibroscan > 8kPa
- Elevated ALT

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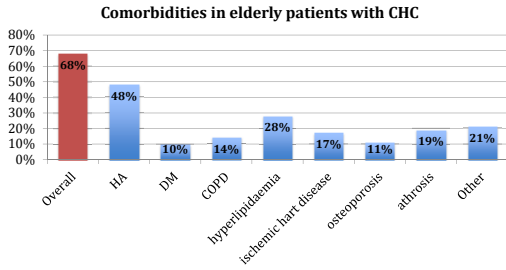
PEG-IFN α +RBV treatment response Baseline patients' characteristics

	≤ 65 yr (n=537)	≥ 65 yr (n=46)	P-value*
Male sex	323 (60.1%)	21 (44.6%)	0.062
Age	41 (34-50)	65.5 (65-67)	<0.001
Duration of infection	8.9 (7.75-16.75)	19 (14.75-28.0)	<0.001
Risk factors			
Transfusion	104 (19.4%)	16 (34.8%)	0.021
Intra-venous drug use	177 (33.0%)	5 (10.9%)	0.001
Operative procedure	92 (17.1%)	8 (17.4%)	1.000
Other	34 (6.3%)	5 (10.9%)	0.221
Unknown	130 (24.2%)	12 (26.1%)	0.724
Genotype			
1a/1b	354 (65.9%)	37 (80.4%)	0.049
2	6 (1.1%)	3 (6.3%)	0.027
3a/3b	163 (30.4%)	4 (8.7%)	0.001
4	14 (2.6%)	2 (4.3%)	0.364

* Mann Whitney U test or Fisher's exact test

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PEG-IFN α +RBV treatment response Baseline patients' characteristics - COMORBIDITIES (2)

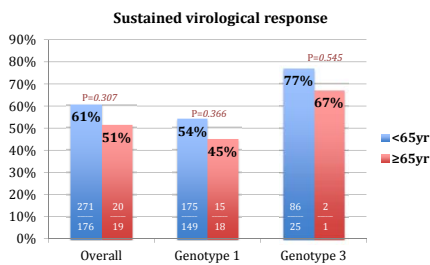


PEG-IFN α +RBV treatment response Baseline patients' characteristics (3)

	<65yr (n=537)	≥65yr (n=46)	P-value*
Liver biopsy (ISHAK score)#			
Mild fibrosis (0,1,2)	59 (14.0%)	4 (10.8%)	0.805
Fibrosis (3,4)	303 (72.0%)	19 (51.4%)	0.014
Cirrhosis (5,6)	59 (14.0%)	14 (37.8%)	<0.001
Laboratory data (median, IQR)			
Albumin, g/L	49.0 (45.9-51.3)	41.5 (40-44)	<0.001
Bilirubin	14.0 (11.2-17.0)	14.1 (11.3-19.5)	0.340
Aspartate aminotransferase	39.7 (28.5-64.5)	54.0 (37.5-88.0)	0.040
Alanine aminotransferase	60.0 (34.5-77.2)	69.0 (46.0-133.0)	0.048
Hemoglobin	142.6 (133.4-156.1)	124.5 (116.0-124.5)	<0.001
Platelet count	186.5 (135.2-259.4)	154.5 (115.4-191.5)	0.010

* Mann Whitney U test or Fisher's exact test
Liver biopsy was performed in 458 patients (37 >65yr; 421 <65yr)

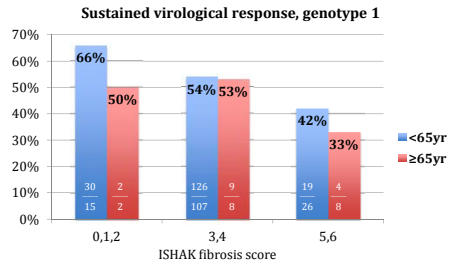
PEG-IFN α +RBV treatment response Sustained virological response



*Fisher's exact test

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PEG-IFN α +RBV treatment response Sustained virological response (2)



PEG-IFN α +RBV treatment side-effects

	≤65yr (n=537)	≥65yr (n=46)	P- value*
Anemia	183 (34%)	32 (69%)	<0.001
Neutropenia	64 (12%)	16 (34%)	<0.001
Thrombocytopenia	48 (9%)	21 (45%)	<0.001
Arthralgiae/mialgiae	70 (13%)	12 (26%)	0.024
Dermatological (including dermatitis, rash, pruritus)	113 (21%)	9 (19%)	1.000
Hipo/hiperthyreosis	21 (4%)	1 (3%)	1.000
Flu-like symptoms	242 (45%)	18 (39%)	0.537
Respiratory symptoms	48 (9%)	6 (12%)	0.422
Anxiety	75 (14%)	9 (19%)	0.279
Depression	16 (3%)	2 (5%)	0.645
Insomnia	27 (5%)	6 (14%)	0.037

* Fisher's exact test

PEG-IFN α +RBV treatment modifications

	≤65yr (n=537)	≥65yr (n=46)	P- value*
PEG-IFN α reduction	31 (5.6%)	5 (9.8%)	0.191
Ribavirin reduction	38 (7%)	9 (19%)	0.007
PEG-IFN α + RBV reduction	11 (2.1%)	2 (4%)	0.237
Therapy discontinuation	38 (7%)	8 (17%)	0.021

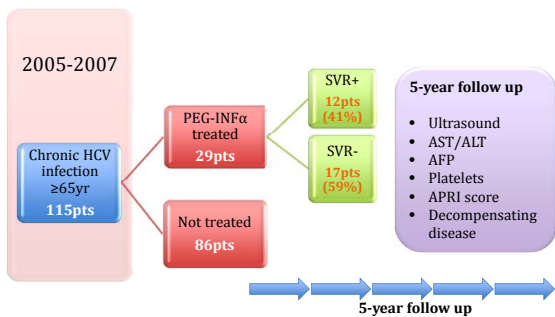
* Fisher's exact test

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PEG-IFN α +RBV treatment response and safety CONCLUSIONS

- Age ≥ 65 yr is associated with:
 - > Genotype 1a/b
 - > higher fibrosis stage
 - > \downarrow Platelets
 - > \downarrow Hemoglobin levels
 - > \downarrow Serum albumins
 - > \uparrow AST/ALT
- PEG-IFN α treatment more frequently cause anemia, thrombocytopenia, neutropenia and treatment discontinuation
- Elderly can be treated safely with similar treatment responses as those <65yr

Clinical course of CHC in elderly patients Cross-sectional study outline



Clinical course of CHC in elderly patients Baseline patients characteristics

	No. / treated (n=86)	PEG-IFN α +RBV treated (n=29)	P- value*
Male sex	40 (46.5%)	8 (27.5%)	0.085
Duration of infection	16.9 (7.75-28.75)	9.8 (6.75-19.25)	0.001
Liver biopsy (ISHAK score)^{#58/18pts}			
Mild fibrosis (0,1,2)	9 (14.0%)	4 (22.2%)	0.735
Fibrosis (3,4)	32 (55.2%)	11 (61.1%)	1.000
Cirrhosis (5,6)	17 (29.3%)	3 (16.6%)	0.395
Laboratory data (median, IQR)			
Albumin, g/L	41.5 (40.0-44.5)	41.5 (40.0-44.0)	0.828
Bilirubin	14.0 (11.2-17.0)	14.1 (11.3-19.5)	0.340
Aspartat aminotransferase	57.0 (45.0-108.5)	54.0 (35.0-85.0)	0.631
Alanine aminotransferase	67.0 (46.0-131.0)	72.0 (46.0-133.0)	0.894
Hemoglobin	137.0 (130.0-146.3)	140.0 (130.0-148.0)	0.504
Platelet count	158.0 (129.2-233.3)	226.0 (173.0-274.0)	0.019

* Mann Whitney U test or Fisher's exact test

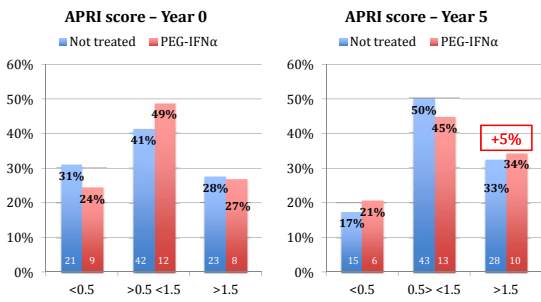
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Clinical course of CHC in elderly patients Baseline patients characteristics (Year 0)

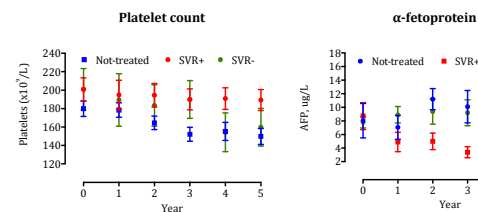
ECHO findings:

- 38% (44pts) had ECHO signs of steatosis
- 20% (23pts) had hepatomegaly
- 11% (13pts) had splenomegaly
- 30% had AFP>5 IU/mL

Clinical course of CHC in elderly patients AST to Platelet Ratio Index (APRI)

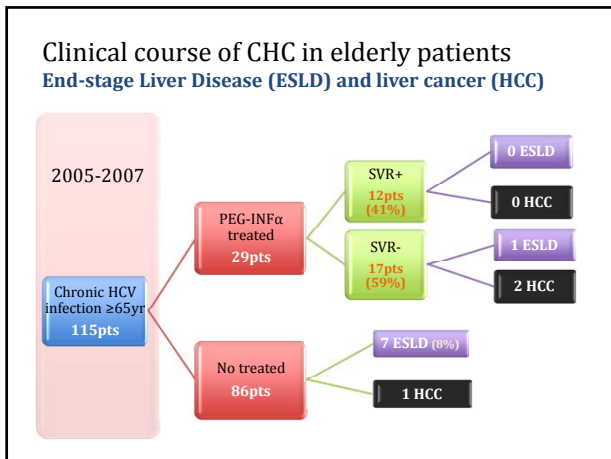


Clinical course of CHC in elderly patients Platelet count and AFP



* Plotted are means with SEM

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CONCLUSIONS

- Elderly patients (>65 years) with CHC should be considered for antiviral treatment
- Treatment decision should take into account individual factors (comorbidities, baseline parameters)
- If treated, more common side-effects should be expected
- If untreated, End-stage liver disease can be expected in 8% of patients at 5 years interval
