GENDER DIFFERENCES IN HCV CHRONIC LIVER DISEASE: A REAL LIFE EVALUATION IN PITER COHORT STUDY

L.A. Kondili* [1], M.G. Quaranta[1], L. Falzano[1], M. Di Gregorio[1], M. Brunetto[2], A. L. Zignego[3], A. Ciancio[4], A. Di Leo[5], M. Rendina[5], G. Raimondo[6], C. Ferrari[7], A. Craxì[8], G. Taliani[9], G. Borgia[10], I. Gentile[10], T. A. Santantonio[11], A. Giammario[11], P Blanc[12], G.B. Gaeta[13], A. Gasbarrini[14], M Siciliano[14], L. Chessa[15], E. M. Erne[16], D. Ieluzzi [17], F.P. Russo[16], P Andreone[18], M Vinci[19], C. Coppola[20], L. Chemello[21], S. Madonia[22], G. Verucchi[23], M.Persico[24], M. Zuin[25], A. Alberti[16], M. Puoti[19], G. Nardone [10], V. De Maria[26], M. Massari[27], G. Montalto[28], G. Foti[29], M. G. Rumi[30], A. Giacometti [31], A. Benedetti[31], G. D'Offizi[32], M. Strazzabosco[33], S. Fargion[34], G. Angarano [35], A. Federico[36], N. Caporaso[37], C Mastroianni[38], P. Toniutto[39], M. Colombo[40], A. Lazzarin [41], C. Torti[42], M. Andreoni[43], F. Rosina[44], C. Viscoli[45], S. Vella[1], E. Villa[46] and PITER collaborating Group available in www.iss.it/piter

•1.Istituto Superiore di Sanità, Rome, 2 Azienda Ospedaliero Universitaria Pisana, Pisa, 4.Careggi, University Hospital, Florence, 4.University of Turin , 5.University of Bari, 6. University of Messina, 7. University of Parma,, 8. University of Palermo, 9. Sapienza University of Rome, 10.University of Naples Federico II, 11.University of Foggia, 12 Santa Maria Annunziata Hospital, Florence, 13. Second University of Naples, 14 Agostino Gemelli, University , Rome, 15.University of Cagliari, 16 Azienda Ospedaliera Padova , 17.University of Verona, 18.University of Bologna, 19 Niguarda Cà Granda Hospital, Milan, 20. Gragnano Hospital, Naples, 21.University of Padova, 22. Villa Sofia Cervello Hospital, Palermo, 23University of Bologna, 24 Giovanni da Procida Hospital, Salerno, 25 San Paolo Hospital Milan, 26 Azienda Ospedaliera Universitaria Mater Domini, Catanzaro, 27.Azienda Ospedaliera S. Maria Nuova , Reggio Emilia, 28.University of Palermo, 29. Azienda Ospedaliera "Bianchi Malacrino-Morelli, Reggio Calabria , 30. San Giuseppe Hospital, Milan, 31.University ofMarche, Ancona, 32.IRCCS Laz zaro Spallanzani Rome, 33. San Gerardo Hospital, Monza, 34.IRCCS Ca' Granda Hospital , Milan, 35. Policlinico Consorziale Hospital" Bari, 36 Second University of Naples, 37 University of Naples Federico II, 38. Santa Maria Goretti, Hospital Latina, 39 University of Udine, 40 IRCCS Cà Granda Hospital, Milan, 41 San Raffaele Hospital, Milan, 42 Azienda Ospedaliero Universitaria Mater Domini", Catanzaro, 43.Tor Vergata University, Rome, 44.Humanitas Gardenico Hospital , Turin, 45.IRCCS San Martino, Genova, 46.University of Modena and Reggio Emilia , Modena, Italy

BACKGROUND and OBJECTIVES

Chronic hepatitis C and liver fibrosis progress more rapidly in men and menopausal women (who are also resistant to IFN-based antivirals) than in fertile women.

A cohort of patients with chronic HCV infection in care has been consecutively enrolled in the Italian Platform for the Study of Therapies of Chronic Viral Hepatitis named PITER.

We assessed the role of gender on the severity of HCV chronic liver disease in a real life perspective of 7492 consecutive patients enrolled in the PITER framework over the last 12 months

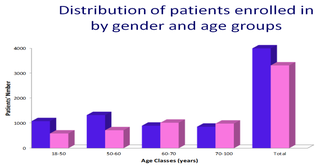
MATERIALS & METHODS

In this cross sectional analysis we aimed to describe sociodemografic (age), clinical (fibrosis stage, and comorbidities), and virological (HCV RNA genotype) characteristics of patients according to the gender. Differences in proportions were evaluated by chi-square test.

The independent role of gender, age, BMI, HCV genotype, alcohol, and comorbidities in the severity of liver disease were evaluated by logistic regression analysis.

RESULTS

Of enrolled patients, 3317 (44%) were female. These were older (mean age 62±12 vs. 58±13 years) and less overweight (33% vs 43%) than males (p<0.05). Genotype (Gt) 1 (70% and 64%) and 2 (20% and 14%) were more prevalent in females compared to Gt 3 (15% vs 7%) and 4 (10% vs 3%) which were more prevalent in males.



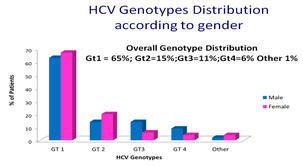
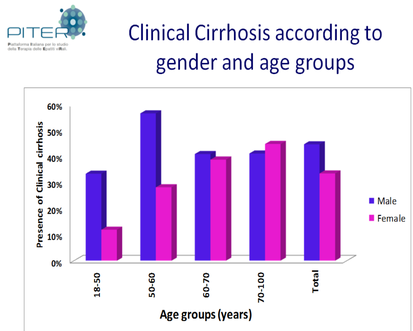


FIGURE 1

F0-F1 fibrosis stage was significantly more prevalent in females (59%) vs males (33%). 66% of females and 44% of males younger than 50 years had F0-F1 fibrosis.

F4/cirrhosis was significantly higher in males (39%) vs females (28%)(p<0.05). In males F4/cirrhosis was present in 30% and 43% of those younger and older than 50 years of age respectively whereas in females in 11% vs. 30% respectively reaching the same distribution as in males after 60 years of age (Figure1)

46% of females were previously treated with IFN-based therapy compared to 63% of males. Of those treated, 40% of females and 27% of males (p<0.05) had F0-F1 fibrosis whereas 34% of females vs. 44% of males had F4/cirrhosis



		Gender		
Comorbidity	**Male N (417"4)**	%	**Female N (3317)**	%
Autoimmine	103	2.4	188	5.6
Cardiovascular	**1251**	**29.9**	**1151**	**34.7**
Diabetes	**616**	**14.7**	**394**	**11.8**
Haematologic	214	5.1	156	4.7
Neurologic	143	3.4	113	3.4
Osteoarticolar	**130**	**3.1**	**345**	**10.4**
Psychiatric	253	6	327	9.8
Renal	157	3.7	89	2.6
Tumours	**150**	**3.6**	**237**	**7.1***
Other	716	17.1	475	14.3

Hypertension (28% vs 20%), osteoarticular diseases (10.4% vs 3.1%) and tumours (7.1 vs 3.6%) were significantly higher in females compared to males.

Male gender, increased BMI, previous alcohol use, genotype 3 and diabetes were independently associated with cirrhosis by logistic regression analysis.

CONCLUSIONS

Females younger than 50 years had significantly lower fibrosis compared to men, however risk of cirrhosis in females increased significantly in women older than 60 years. DAA therapies should therefore be made available to females before occurrence of menopause considering the high rate of cirrhosis in women older than 60 years of age.

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Contact Information
Loreta A. Kondili MD, PhD
Istituto Superiore di Sanità
Viale Regina Elena 299 00161 Rome Italy
Tel: +39 0649903816
email: loreta.kondili@iss.it