

Table 1. Baseline characteristics of euthyroid individuals with biopsy-proven NAFLD stratified by serum TSH status

Variables	Overall	Strict-normal TSH group	High-normal TSH group	P value
<i>N</i>	n=327	n=283	n=44	
Demographics				
Age (years)	41.8 ± 12.0	42.5 ± 11.8	37.3 ± 12.4	0.007
Male (%)	257 (78.6)	218 (77.0)	39 (88.6)	0.037
Concomitant diseases				
Diabetes (%)	75 (22.9)	66 (23.3)	9 (20.5)	0.674
Hypertension (%)	61 (18.7)	55 (19.4)	6 (13.6)	0.286
Hyperlipidemia (%)	132 (40.4)	111 (39.2)	21 (47.7)	0.285
Anthropometry				
BMI (kg/m ²)	26.8 ± 3.5	26.8 ± 3.5	27.2 ± 3.6	0.479
Waist circumference (cm)	92.1 ± 9.0	91.9 ± 9.1	93.5 ± 8.5	0.281
Laboratory parameters				
Leukocyte count (10 ⁹ /L)	6.3 ± 1.6	6.2 ± 1.6	6.4 ± 1.7	0.484
Hemoglobin (g/L)	149.2 ± 13.0	148.9 ± 12.8	151.2 ± 14.3	0.296
Platelet count (10 ⁹ /L)	247.9 ± 58.8	248.1 ± 58.2	246.2 ± 63.3	0.837
ALT (U/L)	76.5 ± 68.6	73.7 ± 68.6	94.0 ± 66.6	0.068
AST (U/L)	47.0 ± 35.3	46.4 ± 35.9	50.4 ± 30.9	0.493
GGT (U/L)	73.5 ± 96.6	72.2 ± 101.7	81.7 ± 53.1	0.543
Albumin (g/L)	46.7 ± 3.5	46.4 ± 3.5	48 ± 3.1	0.005
Total cholesterol (mmol/L)	5.0 ± 1.1	5.0 ± 1.1	5.1 ± 1.2	0.592
Triglycerides (mmol/L)	2.3 ± 1.4	2.3 ± 1.5	2.3 ± 1.1	0.917
HDL-cholesterol (mmol/L)	1.0 ± 0.2	1.0 ± 0.2	1.0 ± 0.2	0.933
LDL-cholesterol (mmol/L)	3.1 ± 0.9	3.0 ± 0.9	3.2 ± 1.0	0.380
Fasting glucose (mmol/L)	5.6 ± 1.4	5.6 ± 1.5	5.4 ± 0.8	0.146
Hemoglobin A1c (%)	6.1 ± 1.4	6.1 ± 1.4	6.1 ± 1.4	0.714
Fasting insulin (pmol/L)	149.4 ± 216.8	140.5 ± 123.9	206.4 ± 501.7	0.391
Fasting C-peptide (pmol/L)	1156.5 ± 677.6	1146.4 ± 634.7	1221.4 ± 913.3	0.495
HOMA-IR score	5.8 ± 9.9	5.5 ± 6.8	7.6 ± 20.9	0.191
Uric acid (µmol/L)	404.2 ± 103.3	399.3 ± 100.4	435.6 ± 117	0.030
TSH (mIU/L)	1.7 ± 0.8	1.5 ± 0.5	3.1 ± 0.6	ND
Free T triiodothyronine (pmol/L)	5.5 ± 0.6	11.3 ± 1.5	10.9 ± 1.3	0.171
Free thyroxine (pmol/L)	11.2 ± 1.5	5.4 ± 0.6	5.6 ± 0.6	0.192
Histological characteristics				
Steatosis (%)				0.007
1	125 (38.2)	116 (41.0)	9 (20.5)	

2	132 (40.4)	111 (39.2)	21 (47.7)	
3	69 (21.1)	56 (19.8)	13 (29.5)	
4	1 (0.3)	0	1 (2.3)	
Ballooning (%)				0.529
0	55 (16.8)	50 (17.7)	5 (11.4)	
1	216 (66.1)	183 (64.7)	33 (75.0)	
2	55 (16.8)	49 (17.3)	6 (13.6)	
3	1 (0.3)	1 (0.4)	0	
Lobular inflammation (%)				0.145
0	40 (12.2)	37 (13.1)	3 (6.8)	
1	207 (63.3)	180 (63.6)	27 (61.4)	
2	72 (22.0)	61 (21.6)	11 (25.0)	
3	8 (2.4)	5 (1.8)	3 (6.8)	
NAS	4.0 ± 1.4	3.9 ± 1.4	4.5 ± 1.4	0.014
NASH (%)	117 (35.8)	92 (32.5)	25 (56.8)	0.004
Fibrosis stage (%)				0.116
0	127 (38.8)	117 (41.3)	10 (22.2)	
1	147 (45.0)	122 (43.1)	25 (56.8)	
2	42 (12.8)	35 (12.4)	7 (15.9)	
3	9 (2.8)	7 (2.5)	2 (4.5)	
4	2 (0.6)	2 (0.7)	0	
Significant fibrosis (F ≥2)	53 (16.2)	44 (15.5)	9 (20.5)	0.411
Advanced fibrosis (F ≥3)	11 (3.4)	9 (3.2)	2 (4.5)	0.986
PNPLA3 I148M polymorphism (%)				0.460
CC	93 (28.4)	78 (27.6)	15 (34.1)	
CG	152 (46.5)	131 (46.3)	21 (47.7)	
GG	82 (25.1)	74 (26.1)	8 (18.2)	

Categorical values are shown as n (%). Continuous variables are shown as mean ± SD.

Abbreviations: ALT, alanine aminotransferase; AST, aspartate aminotransferase; BMI, body mass index; GGT, gamma-glutamyl transferase; HOMA-IR, homeostasis model assessment of insulin resistance; NAS: NAFLD activity score; TSH, thyroid stimulating hormone; ND, not determined.