Ref, year country	Cases (n)	Control (n)	GC vs. control	Case mean level (pg/ml)	Control mean level (pg/ml)	Conclusion
^[1] 2007 Portugal	GC = 48	-	-	$MN = 28 \pm 7$ $WN = 5 \pm 3$	-	Malnourished patients had higher values of TNF- α.
^[2] 2020 Morocco	CG = 65 $PL = 50$ $GC = 40$	H = 63	GC > H	$\begin{array}{l} CG = 51 \pm 20 \\ PL = 55 \pm 28 \\ GC = 117 \pm 92 \end{array}$	36 ± 16	TNF- α serum levels increased in accordance with gastric lesions severity.
^[3] 2019 Turkey	PL = 35 GC = 32	H = 23	GC > H	$PL= 38 \pm 12$ $GC= 47 \pm 15$	34 ± 13	There were significant differences among patients with GC, PCL, and H in terms of TNF- α .
^[4] 2018 China	LG = 40 $AOSG = 40$	-	-	$\begin{array}{l} LG=170\pm51\\ AOSG=185\pm45 \end{array}$	-	No significant differences between the LG and the AOSG
^[5] 2015 Turkey	GC = 58	H = 20	GC > H	Median = 13 (5-58)	10 (6-31)	Serum level of TNF- α may be a diagnostic marker.
^[6] 2003 Germany	GC = 24	H = 48	GC > H	Median = 10 (4 - 46)	2 (0.2–8)	-
^[7] 2011 Turkey	GC = 32	H = 40	GC > H	29 ± 17	10 ± 7	Cachexia in GC is associated with changes in TNF- α .
^[8] 2006 Italy	GC = 10	H = 15	GC > H	205 ± 17	109 ± 9	The use of TNF- α in the screening and prognostic assessment of GC patients could be possible.
^[9] 1994 Japan	GC = 50	-	-	Detected in 13 out of 50 patients	-	TNF is not constantly secreted even when TNF mRNA is expressed.
^[10] 1995 Oman	GC = 21	H = 17	GC < H	16.9	52.34	Detectable in 6 out of 17 H Detectable in 5 out of 21 GC
^[11] 1998 Taiwan	GC = 220	H = 85	-	Detectable in 17 out of 220 patients	Not detected	TNF- α value was not an independent prognostic indicator.
^[12] 2009 Poland	GC = 136	H = 42	GC > H	Detected in 52% of the patients	N/A	TNF level was significantly higher in stages I and IV of the disease.
^[13] 2000 Japan	GC = 20	H = 10	GC < H	107.2 ± 22.8 (45.9)	233.6 ± 48.2	-
^[14] 1198 Japan	GC = 12	H = 6	-	-	-	TNF- α was undetectable in the serum of both cancer patients and controls.
^[15] 2017 Mexico	GC = 162	H = 201	GC ~ H	-	-	No differences in TNF- α levels were observed between GC and controls.
^[16] 2018 China	GC = 176 AH = 117	H = 204	GC ~ H	AH = 6.7 (5.3, 8.3); GC = 10.2 (5.9, 16.4)	5.5 (4.2, 7.2)	-
^[17] 2019 China	GC = 142	H = 98	GC > H	4 (3-6)	3 (3-4)	-

Supplementary Table 1. Literature review of reports on serum TNF- α in GC patients

WN, well-nourished; MN, malnourished; H, healthy; PL, precancerous lesions; LG, laparoscopy group; AOSG, Abdominal Open Surgery Group; AH, atypical hyperplasia; PCL, precancerous lesions

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