

Statistical analysis:

Data were analyzed using Statistical Program for Social Science (SPSS) version 24. Qualitative data were expressed as frequency and percentage. Quantitative data were expressed as mean $\pm$ SD for normally distributed data or median (IQR) for not normally distributed data. **Mean (average):** the central value of a discrete set of numbers, specifically the sum of values divided by the number of values. **Standard deviation (SD):** is the measure of dispersion of a set of values. A low SD indicates that the values tend to be close to the mean of the set, while a high SD indicate that the values are spread out over a wider range. **Median:** The middle number; found by ordering all data points and picking out the one in the middle (or if there are two middle numbers, taking the mean of those two numbers). **IQR (inter-quartile range):** is a measure of statistical dispersion, which is the spread of the data. It is defined as the difference between the 75th and 25th percentiles of the data

Table (): description of demographic data in all studied patients.

		Studied patients (N = 50)	
Age (years)	Mean $\pm$SD	32.4 $\pm$ 12.06	
	Min - Max	14 – 63	
Sex	Male	5	10%
	Female	45	90%
Time of diagnosis	Old diagnosis	44	88%
	Newly diagnosis	6	12%
Disease duration (years) (N = 44)	Mean $\pm$SD	7.3 $\pm$ 5.8	
	Min - Max	0.2 – 26	
Past admission	No	14	28%
	Yes	36	72%
No of past admission (N = 36)	Once	15	41.7%
	Twice	18	50%
	Three times	3	8.3%
Comorbidities	DM	8	16%
	HTN	6	12%
	Major non-SLE comorbidity	8	16%

This table shows the description of demographic data in all studied patients. The mean age of the studied patients was 32.4 $\pm$ 12.06 years, ranging from 14 to 63 years. The majority were females (45 patients, 90%) compared to males (5 patients, 10%). Most patients had an old diagnosis (44 patients, 88%), while only 6 patients (12%) were newly diagnosed. Among patients with available data (N = 44), the mean disease duration was 7.3 $\pm$ 5.8 years, with a range of 0.2 to 26 years. Regarding past admissions, 36 patients (72%) had previous admissions compared to 14 patients (28%) who had none. Among those with prior admissions (N = 36), half had been admitted twice (18 patients, 50%), 15 patients (41.7%) had one admission, and 3 patients (8.3%) had three admissions. As regard comorbidities, DM was present in 8 patients (16%), hypertension (HTN) in 6 patients (12%), and major non-SLE comorbidities were also reported in 8 patients (16%) among the studied patients.

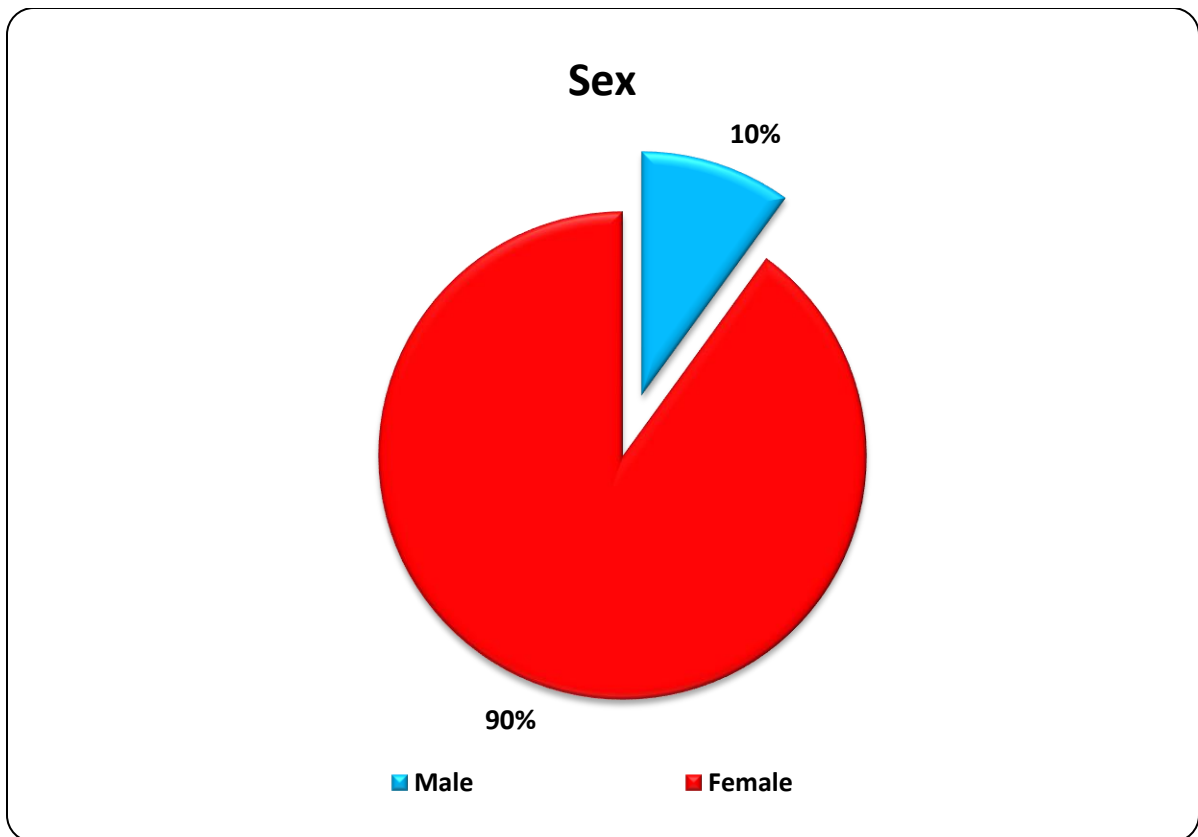


Figure (): description of sex in all studied patients.

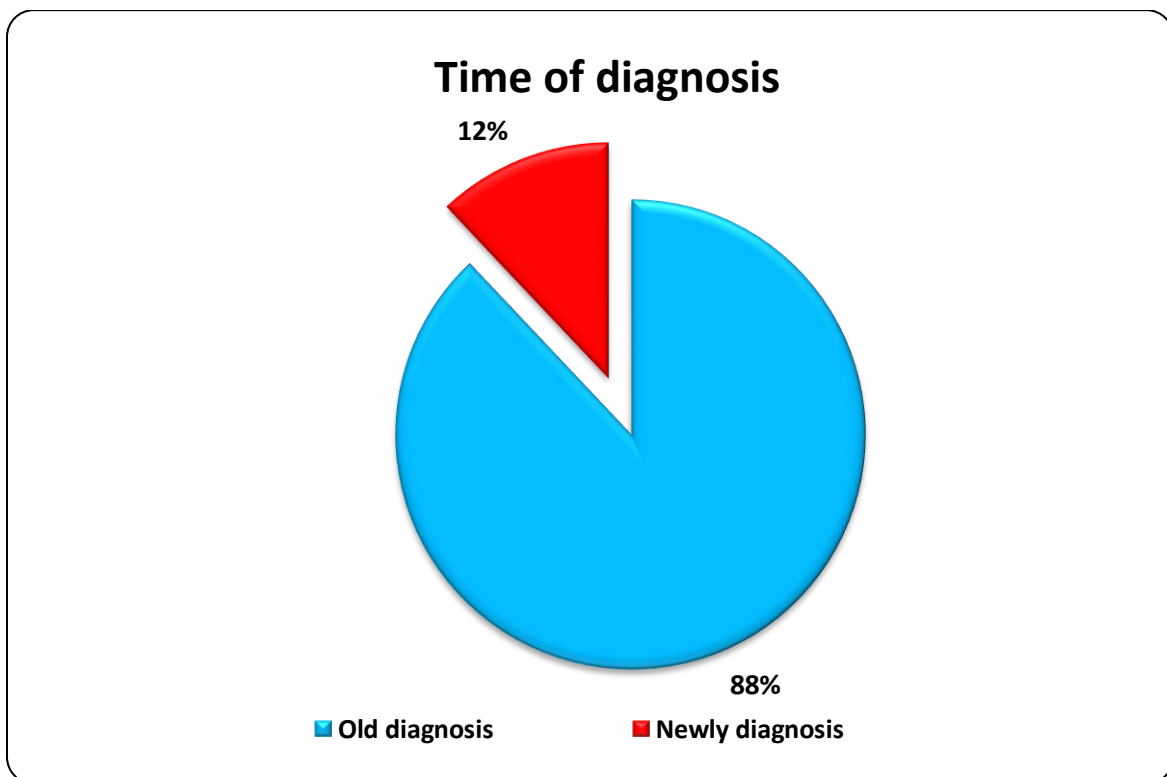


Figure (): description of time of diagnosis in all studied patients.

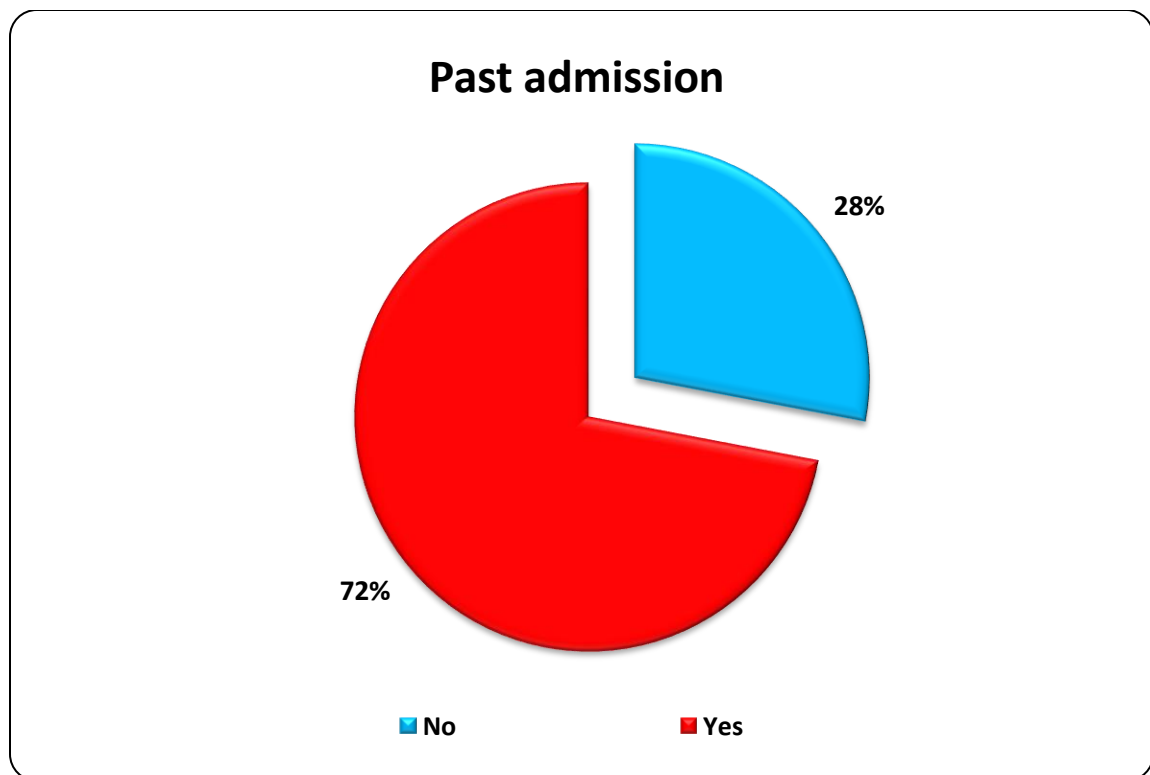


Figure (): description of past admission in all studied patients.

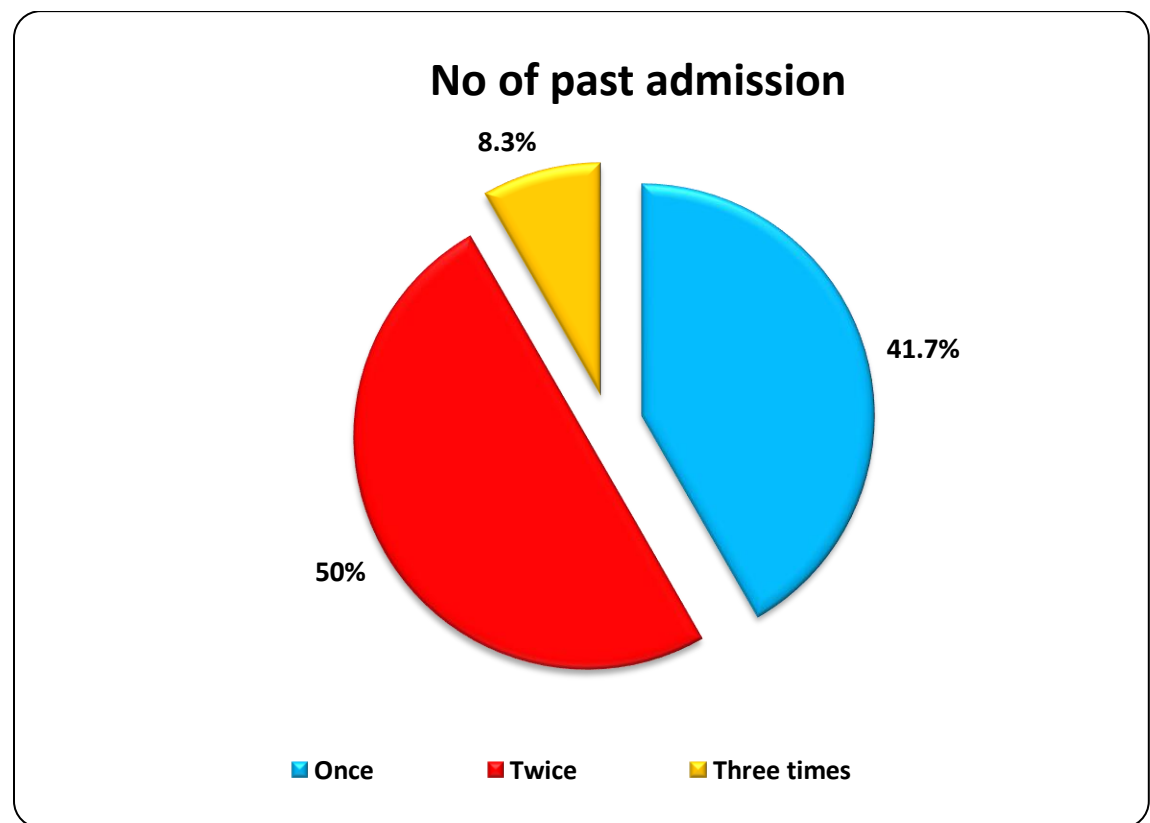


Figure (): description of No of past admission in all studied patients.

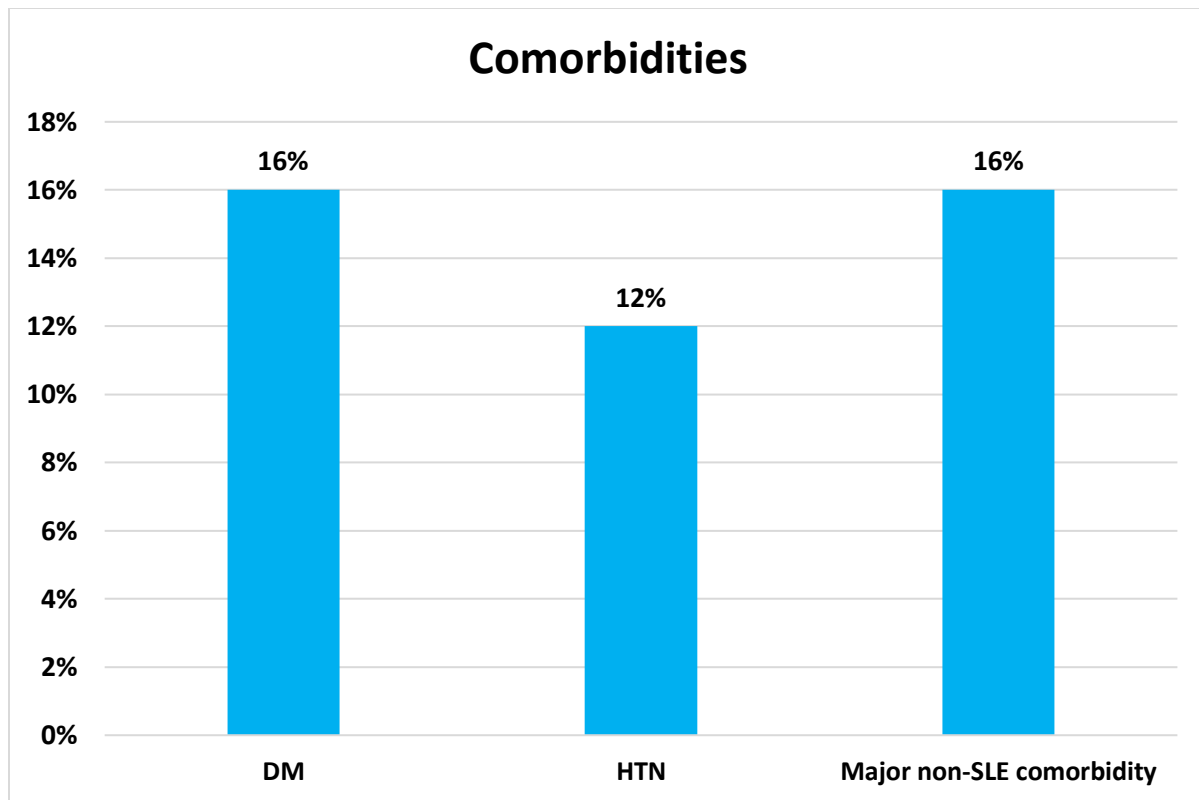


Figure (): description of comorbidities in all studied patients.

Table (): description of total SELDI score in all studied patients.

		Studied patients (N = 50)
Total SLEDI score	Mean $\pm$ SD	11.2 $\pm$ 8.3
	Min - Max	0 – 37

This table shows the description of total SLEDI score in all studied patients. The mean SLEDI score of the studied patients was 11.2 ± 8.3 , ranging from 0 to 37.

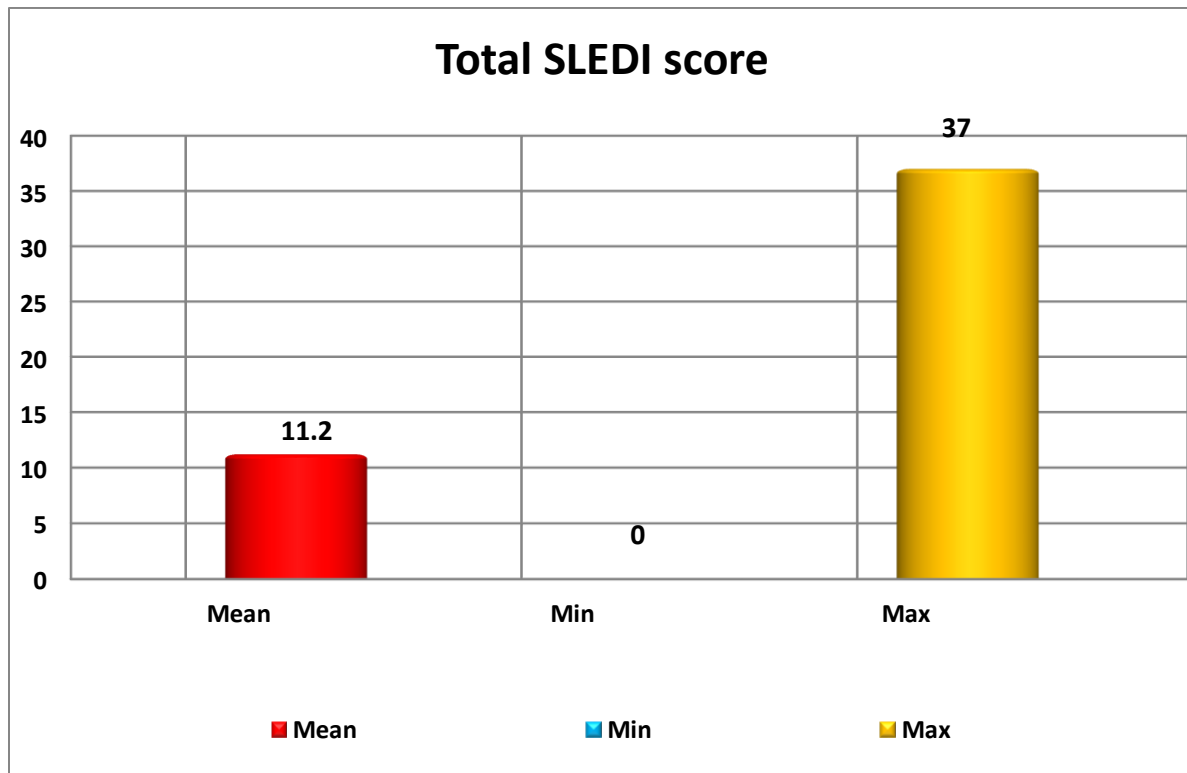


Figure (): description of total SELDI score in all studied patients.

Table (): description of ER presentation variables in all studied patients.

		Studied patients (N = 50)	
Reason for emergency visit	Flare	28	56%
	DKA	5	10%
	Infection	17	34%
Fever	No	14	28%
	Yes	36	72%
Severe presentation	No	35	70%
	Yes	15	30%
Severe presentation (N = 15)	Shock	6	40%
	Altered consciousness	5	33.3%
	Respiratory failure	4	26.7%

This table shows that the most common reason for emergency visit among the studied patients was flare (28 patients, 56%), followed by infection (17 patients, 34%), while DKA was the least frequent (5 patients, 10%). Fever was present in the majority of patients (36 patients, 72%) compared to 14 patients (28%) without fever. Severe presentation was observed in 15 patients (30%), whereas 35 patients (70%) had no severe presentation. Among patients with severe presentation (N = 15), shock was the most frequent cause (6 patients, 40%), followed by altered consciousness (5 patients, 33.3%) and respiratory failure (4 patients, 26.7%).

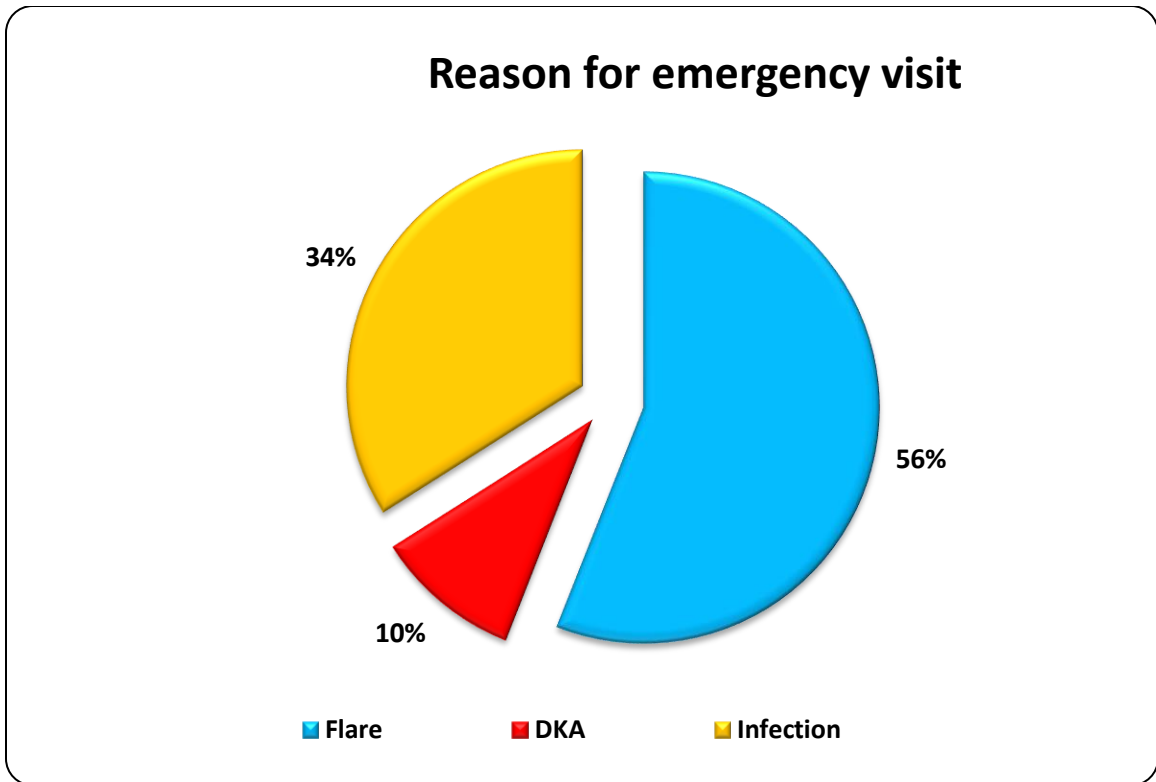


Figure (): description of reason for emergency visit in all studied patients.

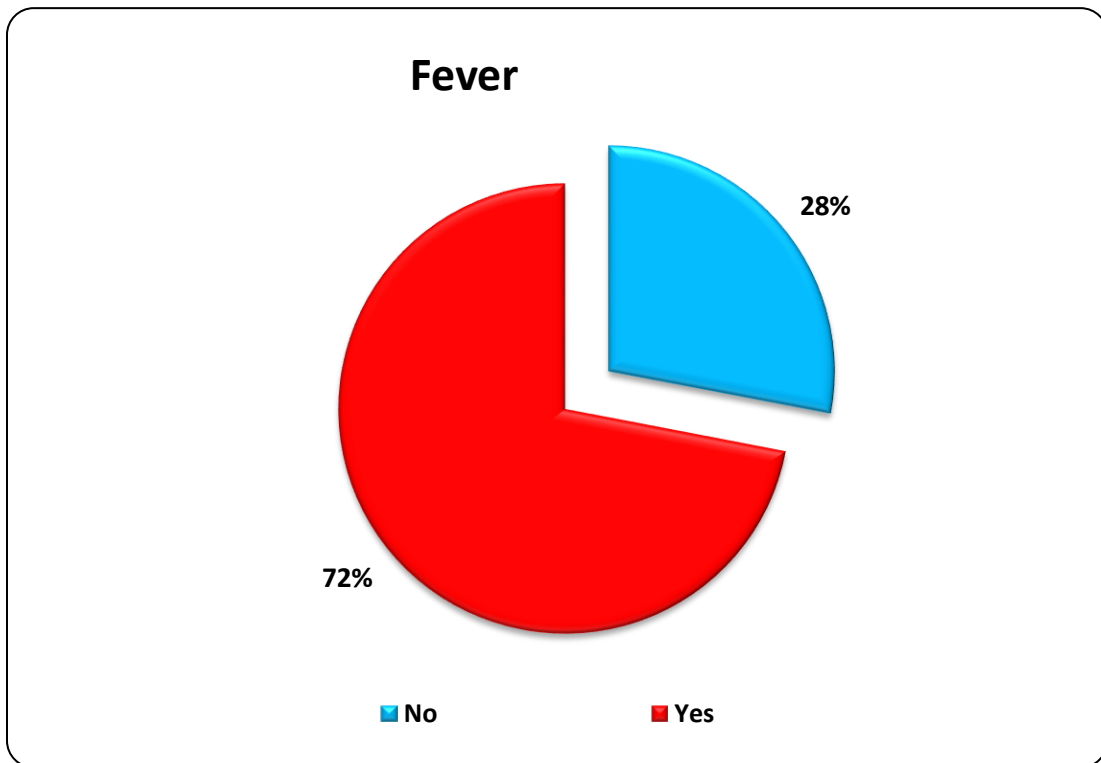


Figure (): description of fever in all studied patients.

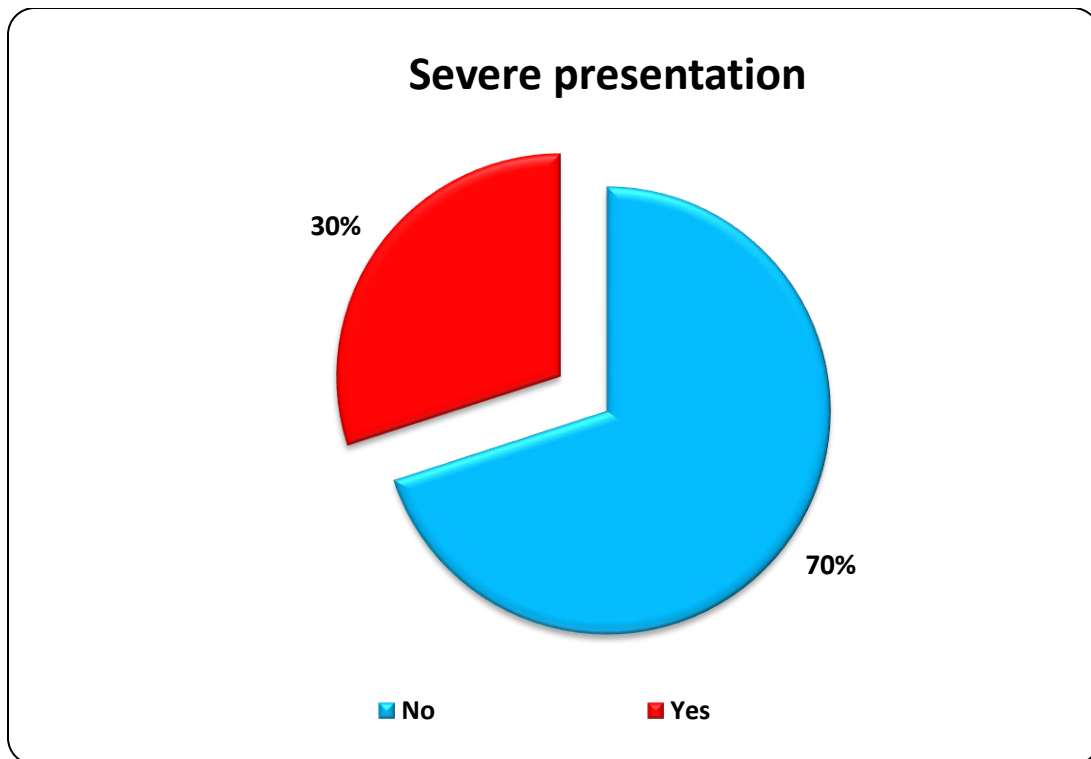


Figure (): description of severe presentation in all studied patients.

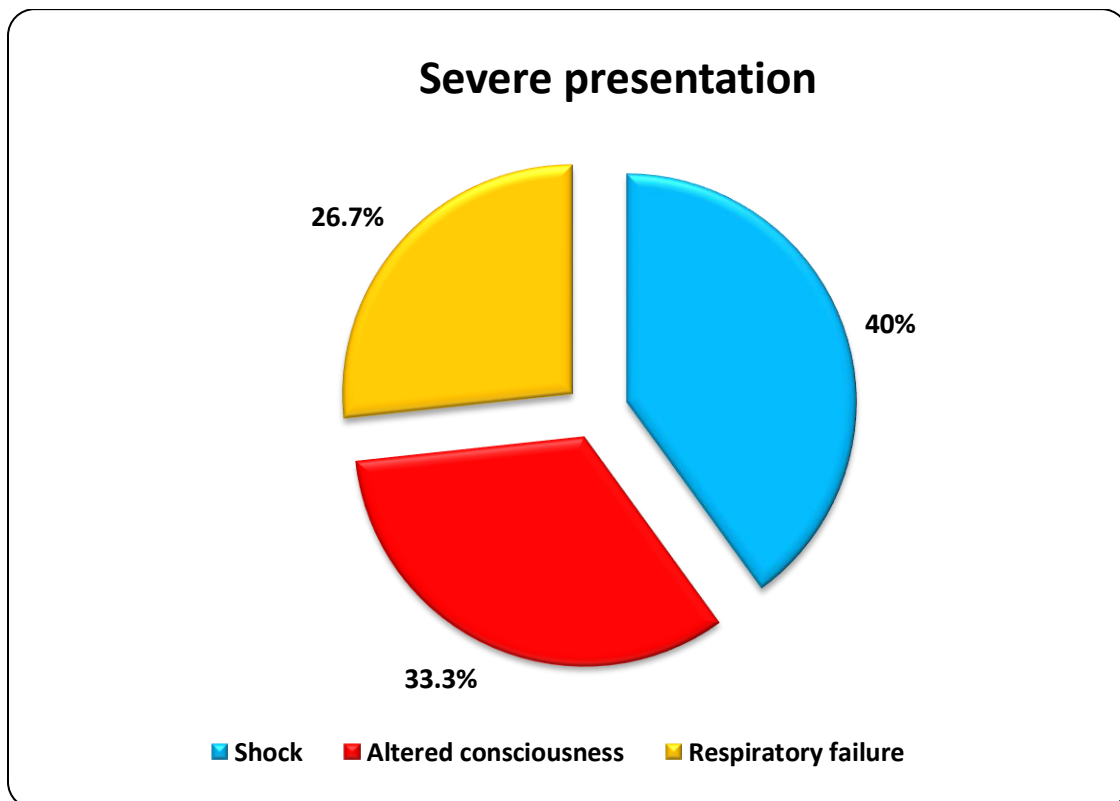


Figure (): description of severe presentation in all studied patients.

Table (): description of laboratory data in all studied patients.

(n = 50)	Mean $\pm$ SD	Median (IQR)
HB	9.1 $\pm$ 2.1	9.4 (7.9 - 10.6)
TLC	10 $\pm$ 7.6	7.3 (4.9 - 13.3)
Platelets	204.2 $\pm$ 117.6	200 (124.8 - 271.3)
ESR	68.1 $\pm$ 43.1	60 (38.8 - 84.8)
CRP	52.5 $\pm$ 57.8	24 (12 - 60)
ALT	42.1 $\pm$ 78.2	24 (19.3 - 35)
AST	40.2 $\pm$ 50.6	31.5 (20.8 - 35)
Bilirubin	1.02 $\pm$ 1.09	0.8 (0.6 - 0.9)
Urea	21.5 $\pm$ 13.8	14.5 (12 - 26)
Creatinine	1.29 $\pm$ 1.59	0.85 (0.6 - 1.4)
INR	0.94 $\pm$ 0.42	0.9 (0.7 - 1)

This table shows the description of laboratory data in all studied patients. The mean hemoglobin level was 9.1 $\pm$ 2.1 g/dL with a median of 9.4 (IQR: 7.9 – 10.6), while the total leukocytic count had a mean of 10 $\pm$ 7.6 with a median of 7.3 (IQR: 4.9 – 13.3). The mean platelet count was 204.2 $\pm$ 117.6 with a median of 200 (IQR: 124.8 – 271.3). Inflammatory markers were elevated, with ESR showing a mean of 68.1 $\pm$ 43.1 and median of 60 (IQR: 38.8 – 84.8), and CRP with a mean of 52.5 $\pm$ 57.8 and median of 24 (IQR: 12 – 60). Liver enzymes showed mean ALT of 42.1 $\pm$ 78.2 with a median of 24 (IQR: 19.3 – 35), and AST of 40.2 $\pm$ 50.6 with a median of 31.5 (IQR: 20.8 – 35), while bilirubin had a mean of 1.02 $\pm$ 1.09 and median of 0.8 (IQR: 0.6 – 0.9). Renal function tests revealed a mean urea of 21.5 $\pm$ 13.8 with a median of 14.5 (IQR: 12 – 26), and creatinine with a mean of 1.29 $\pm$ 1.59 and median of 0.85 (IQR: 0.6 – 1.4). Coagulation profile showed a mean INR of 0.94 $\pm$ 0.42 with a median of 0.9 (IQR: 0.7 – 1).

Table (): description of other studied laboratory data in all studied patients.

		Studied patients (N = 50)	
Abnormal urine analysis	No	31	62%
	Yes	19	38%
ANA	No	20	40%
	Yes	30	60%
Anti ds-DNA	No	25	50%
	Yes	25	50%
C3	Normal	29	58%
	Consumed	21	42%
C4	Normal	30	60%
	Consumed	20	40%
ALB/Creat ratio	Normal	40	80%
	Abnormal	10	20%

This table shows that abnormal urine analysis was present in 19 patients (38%) compared to 31 patients (62%) with normal findings. ANA was positive in 30 patients (60%) and negative in 20 patients (40%), while Anti-dsDNA was equally distributed between positive and negative cases (25 patients, 50% each). Regarding complement levels, C3 was consumed in 21 patients (42%) and normal in 29 patients (58%), while C4 was consumed in 20 patients (40%) and normal in 30 patients (60%). The albumin/creatinine ratio was normal in the majority of patients (40 patients, 80%), whereas it was abnormal in 10 patients (20%).

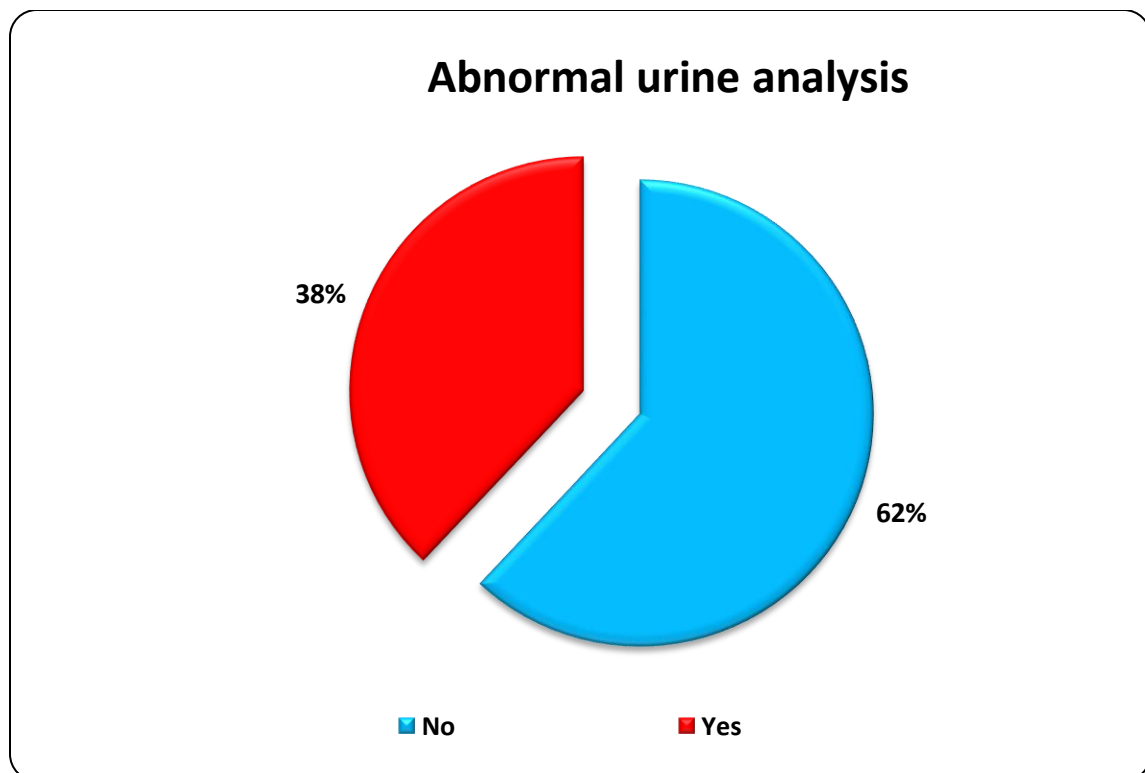


Figure (): description of abnormal urine analysis in all studied patients.

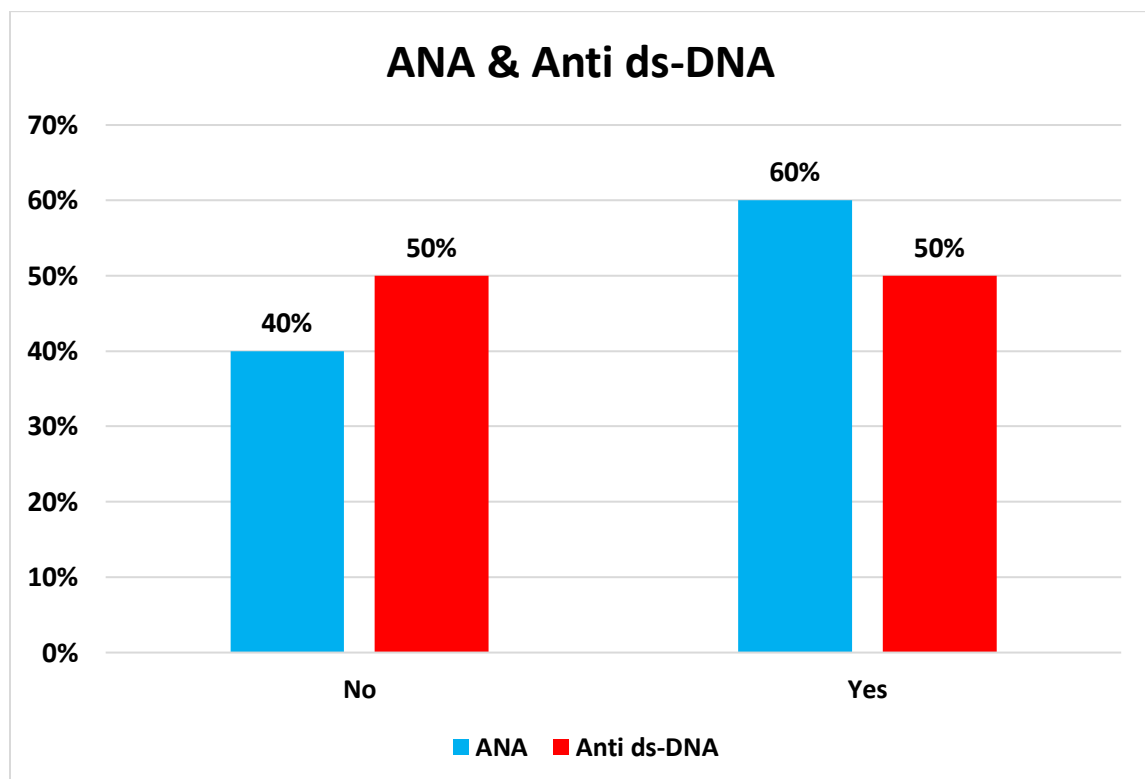


Figure (): description of ANA & Anti- ds-DNA in all studied patients.

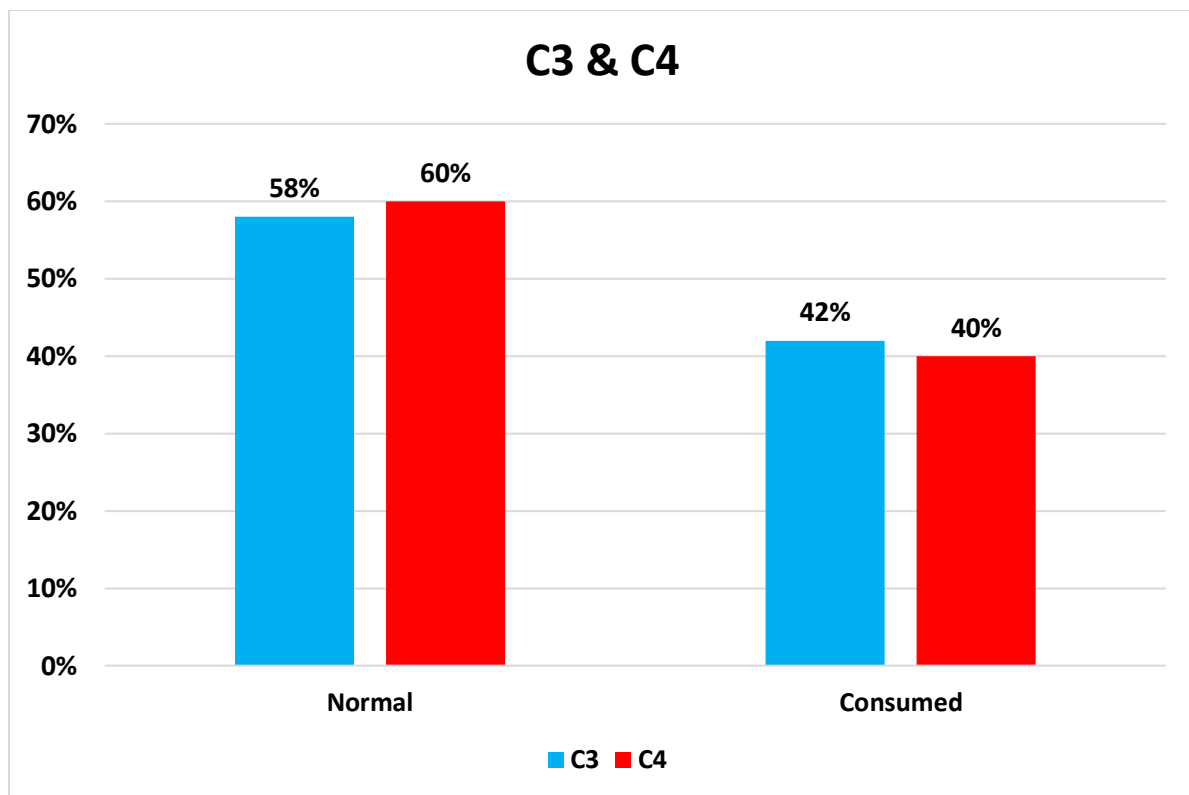


Figure (): description of C3 & C4 in all studied patients.

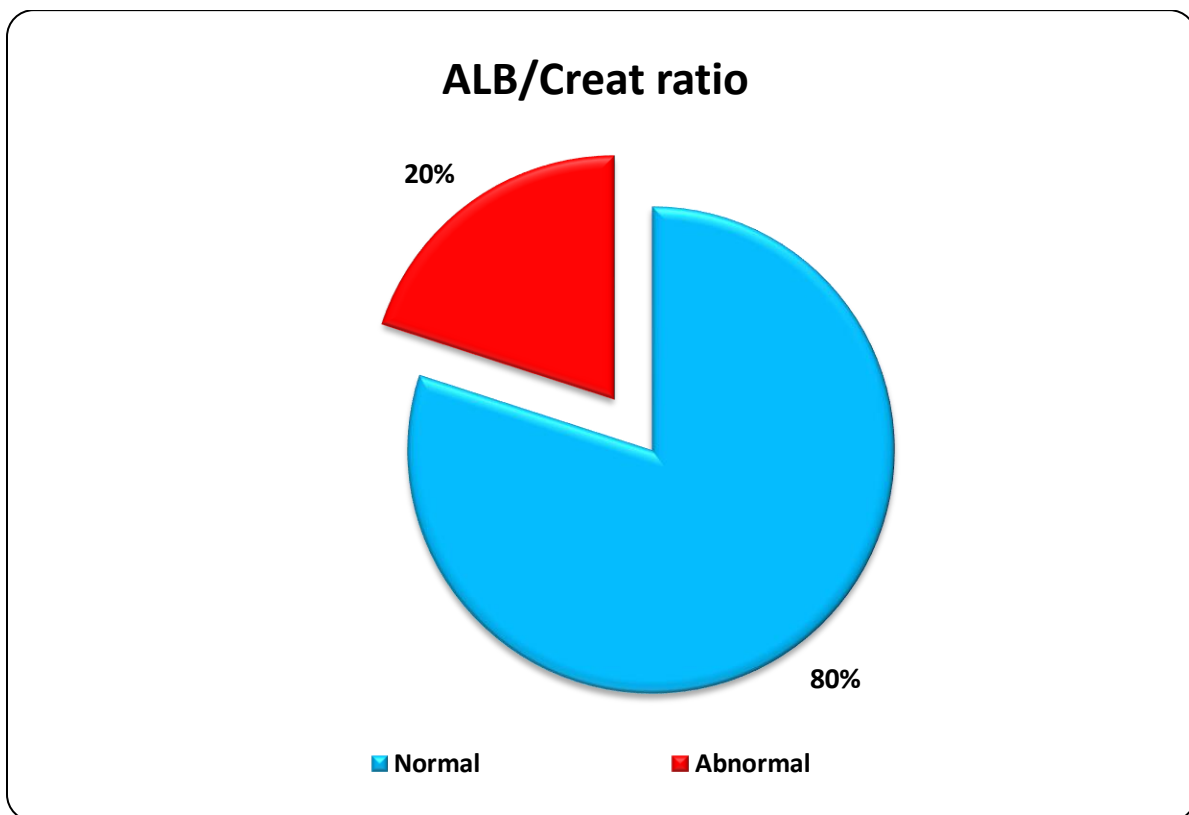


Figure (): description of ALB/Creat ratio in all studied patients.

Table (): description of treatment data in all studied patients.

		Studied patients (N = 50)	
Steroid pulse	No	2	4%
	Yes	48	96%
Steroid dose (N = 48)	Moderate	19	39.6%
	High	29	60.4%
Immunosuppressant escalation	No	19	38%
	Yes	31	62%

This table shows that the majority of the studied patients received steroid pulse therapy (48 patients, 96%), while only 2 patients (4%) did not. Among those who received steroids (N = 48), high doses were more commonly used (29 patients, 60.4%) compared to moderate doses (19 patients, 39.6%). Additionally, immunosuppressant escalation was required in 31 patients (62%), whereas 19 patients (38%) did not require escalation.

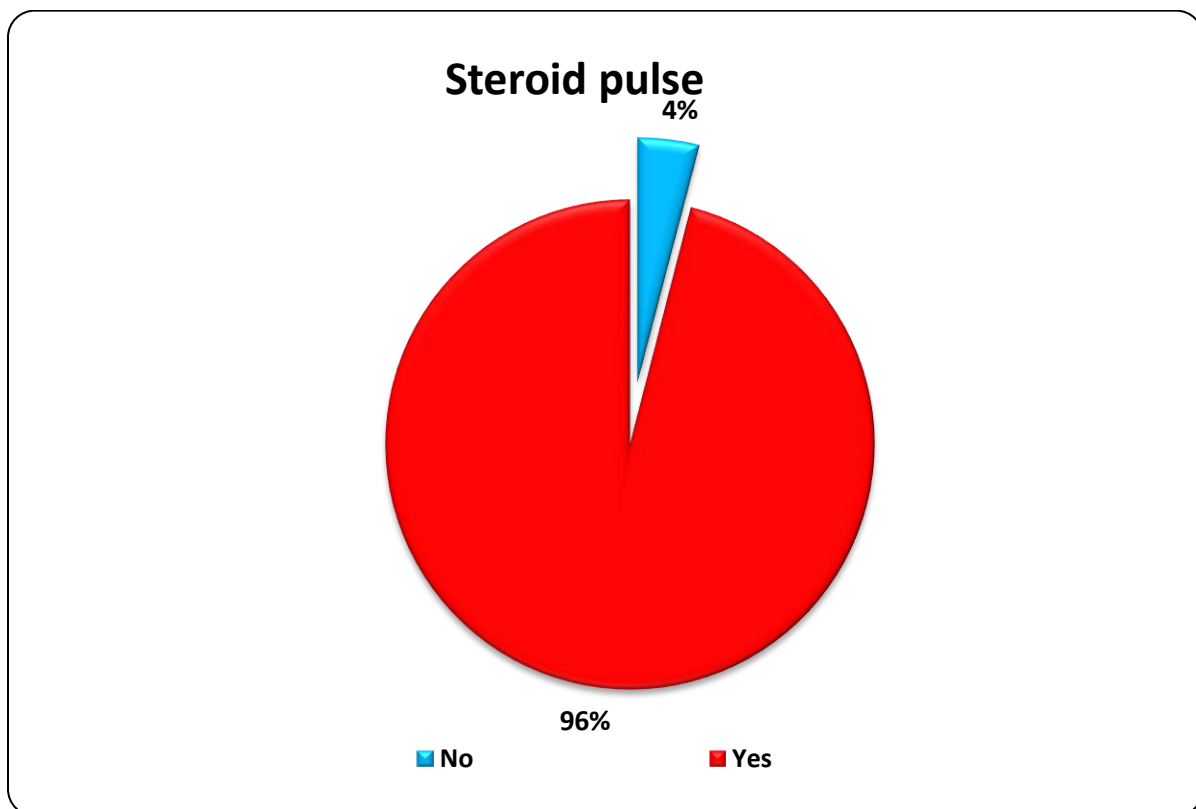


Figure (): description of steroid pulse in all studied patients.

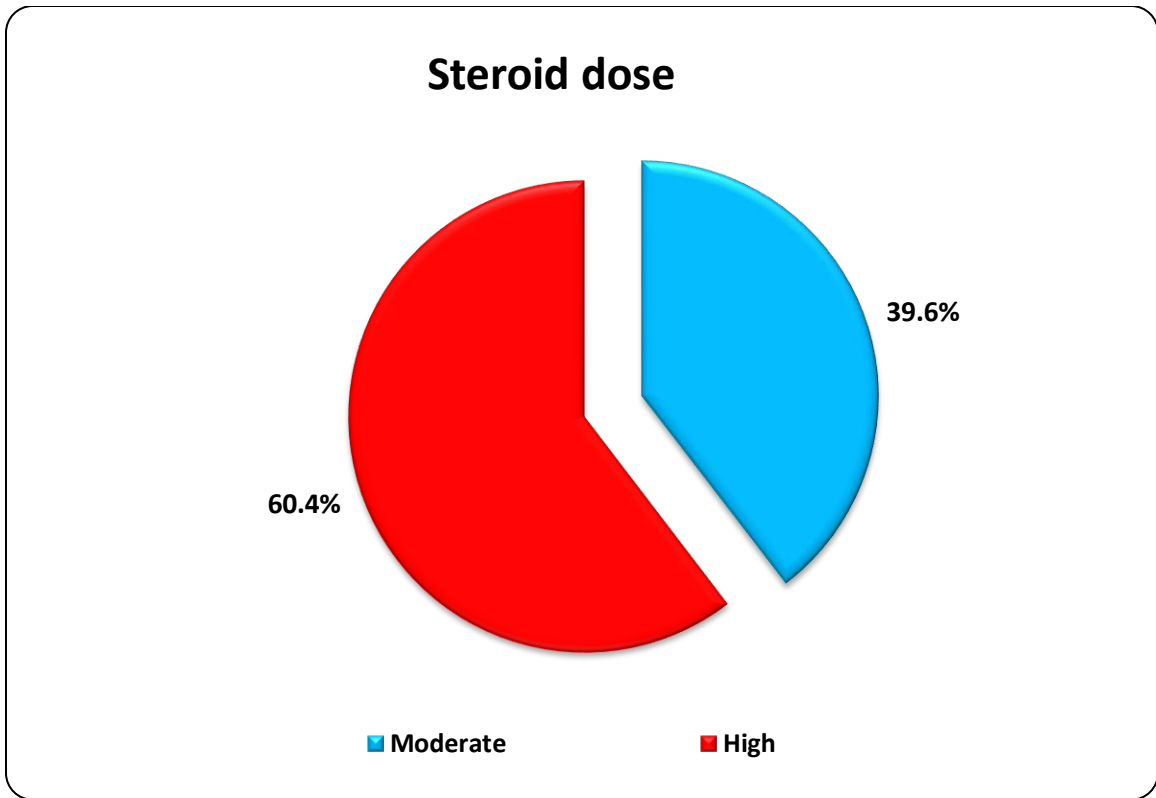


Figure (): description of steroid dose in all studied patients.

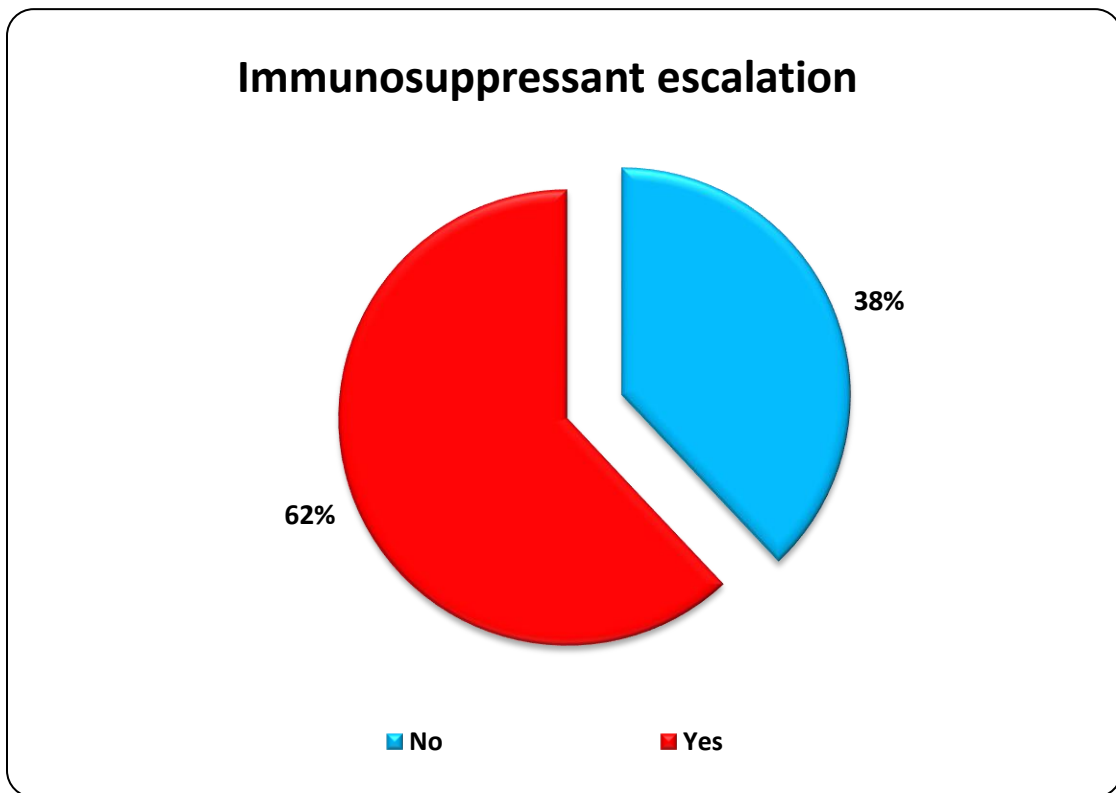


Figure (): description of Immunosuppressant escalation in all studied patients.

Table (): description of primary outcome in all studied patients.

		Studied patients (N = 50)	
ICU admission	No	23	46%
	Yes	27	54%
Outcome (N = 27)	Discharged	21	77.8%
	Death	6	22.2%
ICU duration (N = 27)	Mean $\pm$SD	9.6 $\pm$ 5.5	
	Median (IQR)	8 (6 – 14)	
ICU mortality causes (N = 6)	Encephalitis	1	16.7%
	ARDS	3	50%
	Dialysis	1	16.7%
	Hematoma after renal biopsy	1	16.7%

This table shows that more than half of the studied patients required ICU admission (27 patients, 54%), while 23 patients (46%) did not. Among those admitted to ICU (N = 27), the majority were discharged (21 patients, 77.8%), whereas 6 patients (22.2%) died. The mean ICU stay was 9.6 ± 5.5 days, with a median of 8 days (IQR: 6 – 14). Regarding causes of ICU mortality (N = 6), ARDS was the most common cause (3 patients, 50%), followed by encephalitis, dialysis-related causes, and hematoma after renal biopsy (each reported in 1 patient, 16.7%).

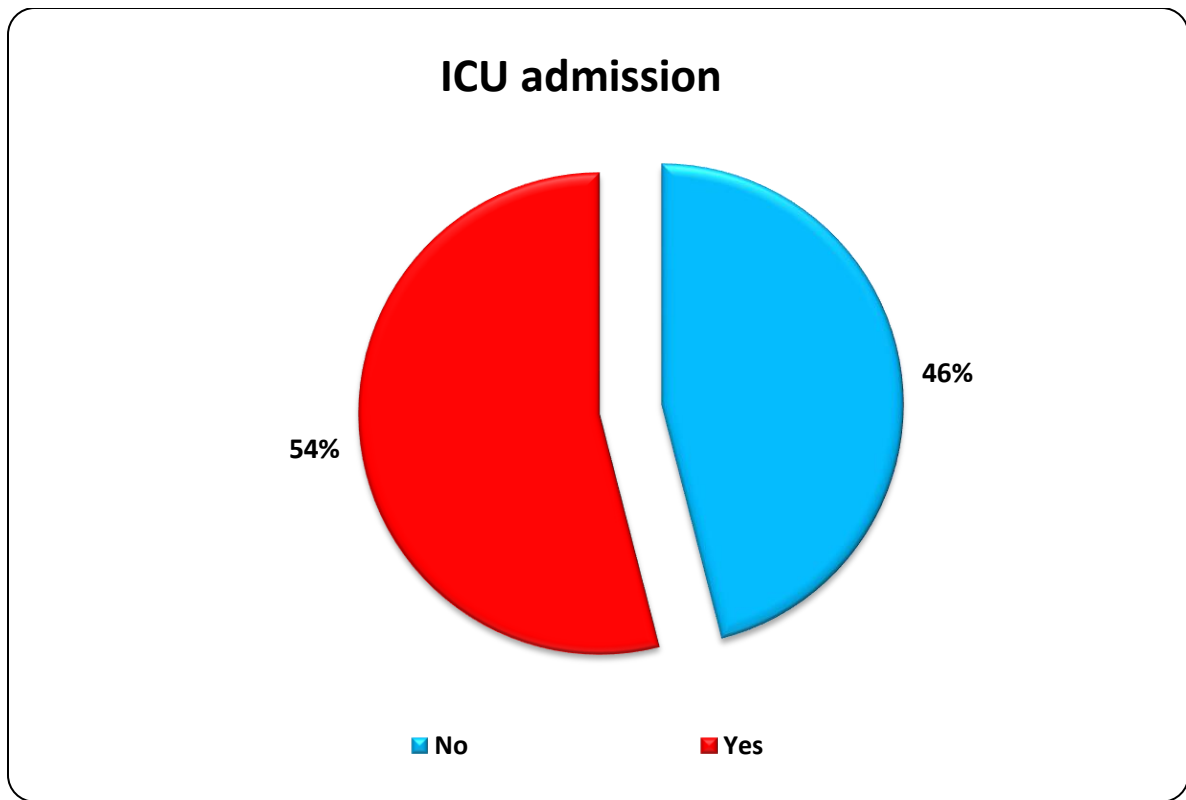


Figure (): description of ICU admission in all studied patients.

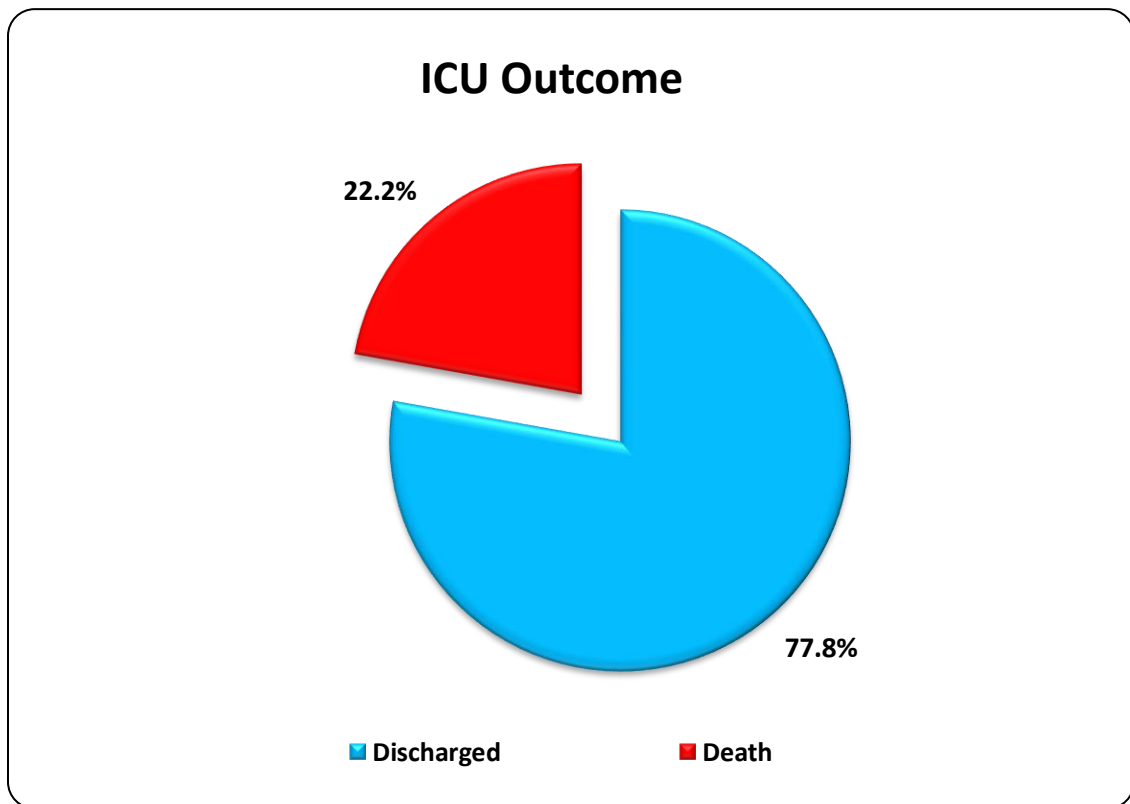


Figure (): description of ICU outcome in all studied patients.

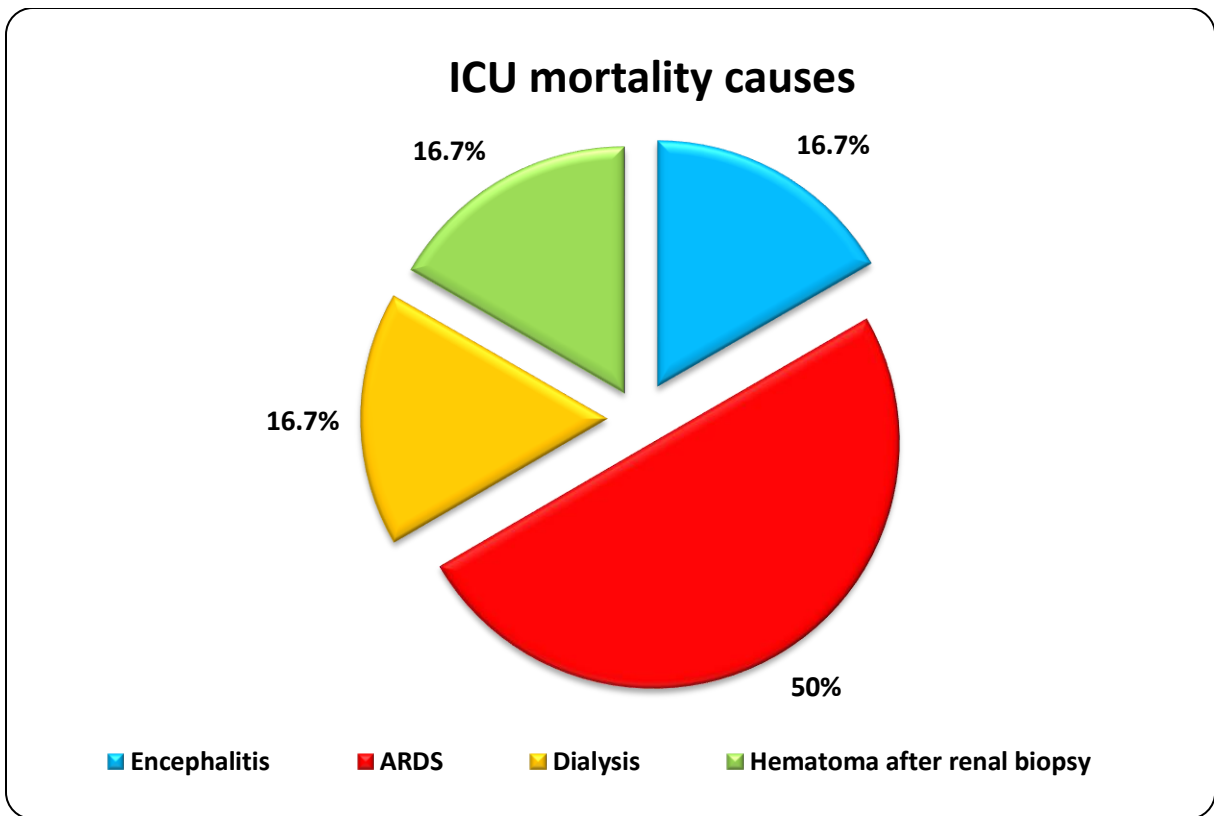


Figure (): description of ICU mortality causes in all studied patients.

Table (): description of secondary outcome in all studied patients.

		Studied patients (N = 50)	
Hospital stay	Mean $\pm$SD	16.1 $\pm$ 8.9	
	Median (IQR)	14.5 (11 – 22)	
Final outcome	Discharge	44	88%
	Death	6	12%
Hb on outcome	Mean $\pm$SD	10.6 $\pm$ 0.9	
	Median (IQR)	10.6 (10 - 11)	
TLC on outcome	Mean $\pm$SD	7.9 $\pm$ 2.6	
	Median (IQR)	8 (6.1 - 9)	
PLTs on outcome	Mean $\pm$SD	235.8 $\pm$ 77.3	
	Median (IQR)	223 (197 - 255)	
INR on outcome	Mean $\pm$SD	1.2 $\pm$ 0.6	
	Median (IQR)	0.9 (0.9 - 1.2)	

This table shows that the mean hospital stay among the studied patients was 16.1 $\pm$ 8.9 days, with a median of 14.5 days (IQR: 11 – 22). Regarding the final outcome, the majority of patients were discharged (44 patients, 88%), while 6 patients (12%) died. At outcome, the mean hemoglobin level was 10.6 $\pm$ 0.9 with a median of 10.6 (IQR: 10 – 11), while the total leukocytic count had a mean of 7.9 $\pm$ 2.6 with a median of 8 (IQR: 6.1 – 9). The mean platelet count was 235.8 $\pm$ 77.3 with a median of 223 (IQR: 197 – 255), and the INR showed a mean of 1.2 $\pm$ 0.6 with a median of 0.9 (IQR: 0.9 – 1.2).

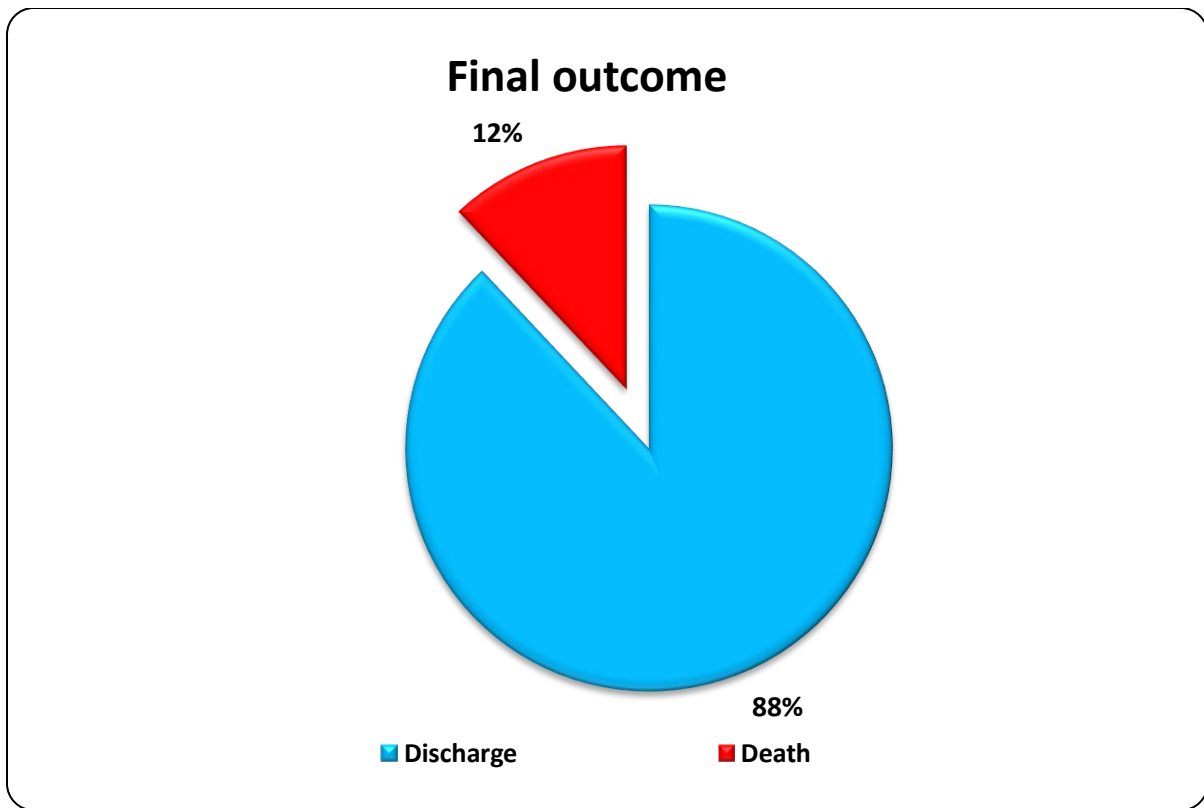


Figure (): description of final outcome in all studied patients.