RESULTS

R E S U L T S

Table (1):

Shows distribution of age among control, persistent and acute diarrhea. It revealed that 20% of control, 72% persistent diarrhea and 56% of acute diarrhea respectively were below one year. Also the age between 13 months to 24 months was 80%, 24% and 24% respectively while above 24 months the age was 0%, 4% and 20% respectively. Statistically was significant between controls and persistent cases ($P < 0.01$) also was significant between controls and acute cases ($P < 0.01$).

Table (2):

Shows age distribution in months in persistent and acute cases. It revealed that 72% of cases (persistent diarrhea) and 56% of acute diarrhea were below 1 year. While 24% of persistent and 24% of acute cases were from 13 months to 24 months. 4% of persistent and 20% of acute cases were above 2 years respectively.

Table (3):

Shows the mean and SD of age among control, persistent and acute diurrhea. It revealed that the mean and SD of age of control, persistent and acute diarrhea was 14.9 $\pm$ 6.13, 10.6 $\pm$ 4.83 and 17.5 $\pm$ 14.05 respectively. Statistically was significnat between control and persistent dirrhea ($P < 0.05$) but insignificant between control and acute dirrhea ($P > 0.05$).

Table (4):

Shows the mean age in months of both persistant and acute cases. It was 10.6$\pm$4.83 and 17.5$\pm$14.05 respectively. This was statistically significant ($P = 0.024$).

Table (5):

Shows sex distribution among control, persistent and acute diarrhea. It revealed that males were 40%, 60% and 60% respectively while females were 60%, 40% and 40% respectively. Statistically was insignificant between control and both persistent and acute diarrhea ($P > 0.05$).

Table (6):

Shows sex distribution in persistent and acute diarrhea. It revealed 60% were males and 40% were females in both persistent and acute cases. This was insignificant (P = 0.00).

Table (7):

Shows feeding pattern among control, persistent and acute diarrhea. It revealed that breast fed was 40%, 56% and 48% respectively but artifical fed was 20%, 24% and 8% respectively while mixed fed was 40%, 20% and 44% respectively. Statistically insignificant between control and both persistent and acute diarrhea ($P > 0.05$).

Table (8):

Shows the feeding patterns in persistent and acute cases. It revealed that 56% of persistent cases were breast-fed while in acute cases, the percentage of breast-fed were 48%. The persistent cases with artificial-fed were 24%, while 8% in acute cases. The persistent cases with mixed feeding were 20% while 44% in acute cases. Statistically insignificant ($P > 0.05$).

Table (9):

Shows that well-nourished cases in persistent and acute diarrhea was 44% and 88% respectively but mal-nourished cases was 56% and 12% respectively, the difference was statistically significant ($P < 0.001$), on the other hand 88% of acute cases and only 12% of persistent cases were malnourished ($P < 0.001$).

Table (10):

Shows the mean and standard deviation of stool frequency in persistent and acute cases. In persistent ones it was 5.5 motion per day and it was 4.6 motions per day for acute ones. It was statistically significant ($P < 0.045$).

Table (11):

Shows distribution of persistent and acute cases as regard the presence or absence of vomiting. It revealed that 36% of persistent cases were had vomiting while in acute cases, 40% were had vomiting. Statistically it was not significant ($P > 0.05$).

Table (12):

Shows distribution of persistent and acute cases, according to presence or absence of dehydration. It revealed that persistent and acute cases with dehydration was 68% and 44% respectively, while persistent and acute cases without dehydration was 32% and 56% respectively. Statistically significant ($P = 0.046$).

Table (13):

Shows tuberclin testing among control, persistent and acute diarrhea. It revealed that induration less than 2mm was 30%, 92% and 80% respectively but induration between 2-5mm was 50%, 8% and 20% respectively while induration more than 5mm was 20%, zero% and zero% respectively, statistically was significant between control and persistent diarrhea ($P < 0.01$) and between control and acute diarrhea ($P < 0.01$).

Table (14):

Shows tuberclin testing in persistent and acute cases. It revealed that 92% of persistent ones had <2 mm induration diameter while 80% of acute ones had <2mm in diameter. While between (2-5mm) of induration, the persistent cases were 8%

and acute ones were 20%, no induration >5 mm was detected either in persistent or acute ones. Statistically insignificant ($P > 0.05$).

Table (15):

Shows mean and SD of T.L.C. lymphocyte, E.rosette and transformation among control, persistent and acute diarrhea. It revealed that mean $\pm$ SD of T.L.C. was 6.720 $\pm$ 2.911, 7.900 $\pm$ 2.300 and 8.590 $\pm$ 3.900 respectively. Statistically insignificant between control and both persistent and acute diarrhea ($P > 0.05$), mean $\pm$ SD of total lymphocytes was 50.53 $\pm$ 2.45, 67.64 $\pm$ 14.50 and 57.4 $\pm$ 18.5 respectively. Statistically was significant between control and persistent diarrhea ($P < 0.001$) but insignificnat between control and acute diarrhea ($P > 0.05$), mean and SD of E.rosette was 61.8 $\pm$ 6.03, 16.92 $\pm$ 6.65 and 25.88 $\pm$ 11.37 respectively. Statistically was significant between control and both persistent and acute diarrhea ($P < 0.001$), mean and SD of transformation was 79.31 $\pm$ 8.82, 31.00 $\pm$ 8.74 and 45.36 $\pm$ 9.82 respectively. Statistically was significant between control and both persist and acute diarrhea ($P < 0.001$).

Table (16):

Shows comparison of mean +SD of different analytical parameters in persistent and acute cases. It revealed that the mean of total leukocytic count for persistent ones was 7.900 ± 2.300 and for acute was 8.590 ± 3.900. Statistically insignificant (P = 0.45). The mean of total lymphocytic counts was 67.460 ± 14.500 for persistent cases and was 57.400 ± 18.500 for acute. The difference was statistically significant. (P = 0.035). The mean of E-Rosette was 16.920 ± 6.650 for persistent cases and 25.880 ± 11.370 for acute. The difference was statistically highly significant. (P = 0.001). The mean of transformation is 31.000 ± 8.740 for persistent and 45.360 ± 9.820 for acute ones. Statistically was highly significant (P = 0.001).

Table (17):

Shows correlation coefficient between different clinical and laboratory data in persistent cases. All were non significant.

Table (18):

Shows comparison of E-Rosette and transformation among persistent cases according to the age. It revealed that E-rosette for persistent cases below one year was 15.111±2.928 and above one year was 21.571±8.129, statistically was significant (P<0.05). While transformation for persistent cases below one year was 32.889±8.396 and above one year was 26.143±7.234, statistically was significant (P<0.05).

Table (19):

Shows the comparison of analytical data for persistent cases as regard the nutritional status. It revealed that the mean of total leukocytic count for well-nourished cases was 7.854 ± 2.528 and for malnourished cases was 7.935 ± 2.206 statistically insignificant (P > 0.05). Also the mean total lymphocytes for well-nourished cases was 66.73 ± 14.97 while for malnourished cases was 68 ± 15.27, statistically insignificant (P > 0.05). The mean of E-Rosette for well-nourished cases was 15.91 ± 2.81 while for malnourished cases

was 13.57 ± 1.16, statistically significant (P < 0.01). The mean of transformation for well-nourished cases was 31.41 ± 9.94 while for malnourished cases was 23.1 ± 6.7, statistically significant (P < 0.01).

Table (20):

Shows comparison of analytical data in persistent cases as regard feeding pattern. It revealed that the mean of total leukocytic count for breast fed cases was 8.47 ± 2.55 while for artificial fed ones was 7.56 ± 0.94 and 7.16 ± 2.22 for mixed fed ones. The mean of total lymphocytes for cases was 67.07 ± 15.9 for breast fed ones, while for artificial fed was 71.50 ± 4.92 and for mixed fed cases was 71.00 ± 13.9. The mean of E-Rosette for cases was 18.21 ± 8.49 for breast fed while for artificial fed was 14.83 ± 2.56 and for mixed fed was 16.20 ± 2.28. The mean of transformation for cases was 30.07 ± 8.0 for breast fed while for artificial fed was 36.17 ± 6.91 and for mixed fed was 31.60±8.81. All results were insignificant (P > 0.05).

Table (21):

Shows the comparison between different analytical data in persistent cases according to dehydration. It revealed that the mean of total leukocytic count for cases with dehydration was 7.66 ± 2.32 while for cases without dehydration was 8.24 ± 2.44. The mean of total lymphocytes for cases with dehydration was 68.64 ± 15.5 while for cases without dehydration was 66.36 ± 13.8. The mean of E-Rosette for cases with dehydration was 15.71 ± 4.6 while for cases without dehydration was 18.45 ± 8.6. The mean of transformation for cases with dehydration was 31.0 ± 10.17 while for cases without dehydration was 31.0 ± 6.99. All results were insignificant ($P > 0.05$).

Table (1): Distribution of age among controls, persistent and acute diarrhea.

Age	4-12 month		13-24 month		>24 month		X^2	P
	No.	%	No.	%	No.	%		
Control (10)	2	20	8	80	0	0		
Persistent (25)	18	72	6	24	1	4	9.97	<0.01**
Acute (25)	14	56	6	24	5	20	9.63	<0.01**

Table (2): Distribution of age in persistent and acute cases.

Age in months	Persistent		Acute	
	No.	%	No.	%
4 - 12	18	72	14	56
13 - 24	6	24	6	24
> 24	1	4	5	20
Total	25	100	25	100

$X^2 = 3.17$

$P < 0.05$

Table (3): Mean and SD of age among control, persistent and acute diarrhea.

	Mean	±SD	t	P
Control (10)	14.9	6.13		
Persistent (25)	10.6	4.83	1.972	<0.05 *
Acute (25)	17.5	14.05	0.82	>0.05

Table (4): Mean and standard deviation of age in persistent and acute cases.

	Total No.	Mean age ± S.D.
Persistent	25	10.6 mo 4.83
Acute	25	17.5 mo 14.05

t = -2.33

P = 0.024* (Significant)

Table (5): Distribution of sex among control, persistent and acute diarrhea.

Sex	Male		Female		X^2	P
	No.	%	No.	%		
Control (10)	4	40	6	60		
Persistent (25)	15	60	10	40	1.51	>0.05
Acute (25)	15	60	10	40	1.51	>0.05

Table (6): Distribution of sex in persistent and acute cases.

Sex	Persistent		Acute	
	No	%	No	%
Male	15	60	15	60
Female	10	40	10	40
Total	25	100	25	100

X^2 = 0.00

P = 0.00 (Insignificant).

Table (7): Feeding pattern among control, persistent and acute diarrhea.

Age	Breast fed		Artifical fed		Mixed		X^2	P
	No.	%	No.	%	No.	%		
Control (10)	4	40	2	20	4	40		
Persistent (25)	14	56	6	24	5	20	1.506	>0.05
Acute (25)	12	48	2	8	11	44	1.047	>0.05

Table (8): Feeding pattern in persistent and acute cases.

	Persistent		Acute	
	No.	%	No.	%
Breast fed	14	56	12	48
Artificial fed	6	24	2	8
Mixed	5	20	11	44
Total	25	100	25	100

$X^2 = 0.32$

$P > 0.05$ (Insignificant)

Table (9): Nutritional status in persistent and acute cases.

	Persistent		Acute	
	No.	%	No.	%
Well nourished	11	44	22	88
Mal nourished	14	56	3	12
Total	25	100	25	100

$X^2 = 10.784$

$P < 0.001^*$ (Highly significant)

Table (10): Stool frequency in persistent and acute cases (Mean ± SD).

	Total No.	Mean	± SD
Persistent	25	5.5	1.58
Acute	25	4.6	1.44

t = 2.06

P = 0.045* (Significant)

Table (11): Distribution of vomitting in persistent and acute cases.

Vominting	Persistent		Acute	
	No.	%	No.	%
Present	9	36	10	40
Absent	16	64	15	60

X^2 = 0.085

P > 0.05 (Insignificant).

Table (12): Distribution of dehydration in persistent and acute cases.

Dehydration	Persistent		Acute	
	No.	%	No.	%
Present	17	68	11	44
Absent	8	32	14	56

X2 = 3.119

P = 0.046* (Significant)

Table (13): Tuberclin testing among control, persistent and acute diarrhea.

Age	< 2 mm		2-5 mm		> 5 mm		X^2	P
	No.	%	No.	%	No.	%		
Control (10)	3	30	3	50	2	20		
Persistent (25)	23	92	2	8	0	0	13.52	<0.01**
Acute (25)	20	80	5	20	0	0	10.23	<0.01**

Table (14) Tuberclin testing in persistent and acute cases.

Tuberclin	Persistent		Acute	
	No.	%	No.	%
<2 mm	23	92	20	80
2-5 mm	2	8	5	20
> 5 mm	0	-	0	-
Total	25	100	25	100

X = 1.445

P > 0.05 (Insignificant).

Table (15): Mean and SD of T.L.C., lymphocyte, E.rosette and transformation among control, persistent and acute diarrhea.

	T.L.C.	Lymphocyte	E.rosette	Transformation
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD
Control (10)	6.720± 2.911	50.53 ± 2.45	61.8 ± 6.03	79.31 ± 8.82
Persistent (25)	7.900± 2.300	67.64 ±14.50	16.92± 6.65	31.00 ± 8.74
t	1.146	5.641	19.262	14.684
P	>0.05	<0.001***	<0.001***	<0.001***
Acute (25)	8.590± 3.900	57.4 ± 18.5	25.88±11.37	45.36 ± 9.82
t	1.545	1.817	12.09	10.13
P	>0.05	>0.05	<0.001***	<0.001***

ble (16): Mean and SD of different analytical parameters in persistent and acute cases.

	Persistent (25)		Acute (25)		T value	P
	Mean	±SD	Mean	±SD		
; Counts	7.900	2.300	8.590	3.900	0.75	0.45
ıtrophils	29.640	15.370	36.800	18.810	1.47	0.147
ıphocytes	67.640	14.500	57.400	18.500	2.18	0.035*
.nophils	0.960	0.970	1.160	1.020	0.70	0.480
ıocytes	2.16	0.746	2.760	1.091	2.27	0.028
.ophils	0.720	0.737	0.520	0.510	1.12	0.270
:osette	16.920	6.650	25.880	11.370	3.40	0.001***
.nsformation	31.000	8.740	45.360	9.820	5.46	0.001***

Table (17): Correlation coefficient between different clinical and laboratory data in persistent cases.

	T.L.C.	Lymphocyte	E.Rosette	Trans-formation
Age	-0.632	-0.4303	0.1272	-0.2503
Weight	-0.1416	-0.2995	-0.1461	-0.1990
Length	0.2538	0.0485	0.1857	0.2378
Motion	0.0434	0.1713	0.2693	0.1385
Dehydrat	-0.3012	0.2454	-0.1784	0.1036
Wt/length	-0.3012	0.2454	-0.1784	0.1036
Wt/age	-0.0953	-0.2352	-0.2459	0.0265

All are nonsignificant

Table (18): E.Rosette and transformation among persistent cases according to age.

	Below one year		Above one year		t	P
	Mean	±SD	Mean	±SD		
E.rosette	15.111	2.928	21.571	8.129	2.052	<0.05*
Transformation	32.889	8.396	26.143	7.234	2.01	<0.05*

Table (19): Comparison of analytical data in persistent cases according to nutritional status.

	Well-nourished (11)	Malnourished (14)	t	P
	Mean ± SD	Mean ± SD		
T.L.count	7.854 ± 2528	7.935 ± 2.206	.086	>0.05
Lymphocyte	66.73 ± 14.97	68 ± 15.27	0.204	>0.05
E.Rosette	15.91 ± 2.81	13.57 ± 1.158	2.83	<0.01**
Transformation	31.41 ± 9.94	23.1 ± 6.68	2.65	<0.01**

Table (20): Comparison of analytical data in persistent cases according to feeding pattern.

	T.L.C.	lymphocyte	E.Rosette	Trans-formation
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD
Breast fed	8.47 ± 2.55	67.07 ± 15.9	18.21 ± 8.49	30.07 ± 8.0
Atrificial	7.56 ± 0.94	71.50 ± 4.92	14.83 ± 2.56	36.17 ± 6.91
Mixed fed	7.16 ± 2.22	71.00 ± 13.9	16.20 ± 2.28	31.60 ± 8.81
F test	0.787	0.282	0.577	1.24
P	>0.05	>0.05	>0.05	>0.05

P > 0.05 (Insignificant).

Table (21): Comparison betweeen different analytical parameters in persistent cases according to dehydration.

	T.L.C.	Lymphocyte	E.Rosette	Trans-formation
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD
Cases with dehydration	7.66 ± 2.32	68.64 ± 15.5	15.71 ± 4.6	31.0 ± 10.17
Cases without dehydration	8.24 ± 2.44	66.36 ± 13.8	18.45 ± 8.6	31.0 ± 6.99
t value	0.601	0.439	0.960	0.000
P	>0.05	>0.05	>0.05	0.000