

PART III

R E S U L S

RESULTS

The following tables and figures summarize the results obtained from our study:-

Year	Total cases admitted	Cases of empyema	% of empyema
1975	1463	15	1.03
1976	1333	13	0.98
1977	1338	12	0.90
1978	1340	11	0.82
1979	1296	10	0.77
1980	1485	9	0.60
1981	1626	9	0.55
Total	9881	79	0.8

Table (1) : Incidence of empyema to total admitted, in the years of study.

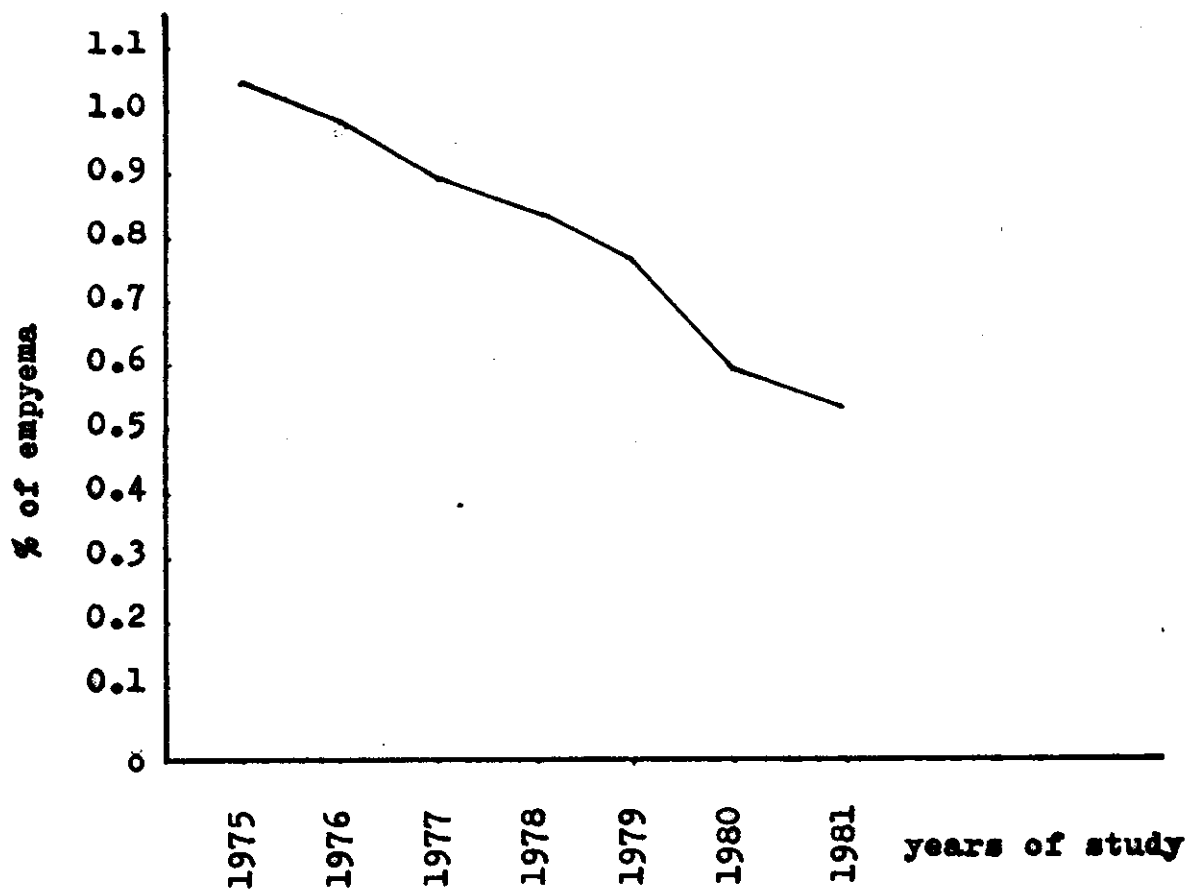


Fig.(1) : Incidence of empyema in the years of study.

Year	Cases of resp. infection	Cases of empyema	% of empyema
1975	297	15	5
1976	259	13	4.6
1977	262	12	4.5
1978	247	11	4.4
1979	260	10	3.8
1980	318	9	2.8
1981	332	9	2.7
Total	1975	79	4

Table (2) : Incidence of empyema to respiratory
infection admission in the years of study.

Months Admissions	Jan.	Feb.	Mar.	April	May	Jun.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
--Total	665	681	665	704	879	997	1110	982	845	845	784	724	9881
--Resp. infect.	185	198	230	264	191	150	133	108	115	107	126	168	1975
--Empyema	9	12	14	15	8	4	2	2	1	-	5	7	79
--% of emp. to total	1.3	1.7	2	2.3	0.8	0.4	0.2	0.2	0.1	-	0.6	0.9	0.8

Table (3) : Monthly admissions throughout the period of study.

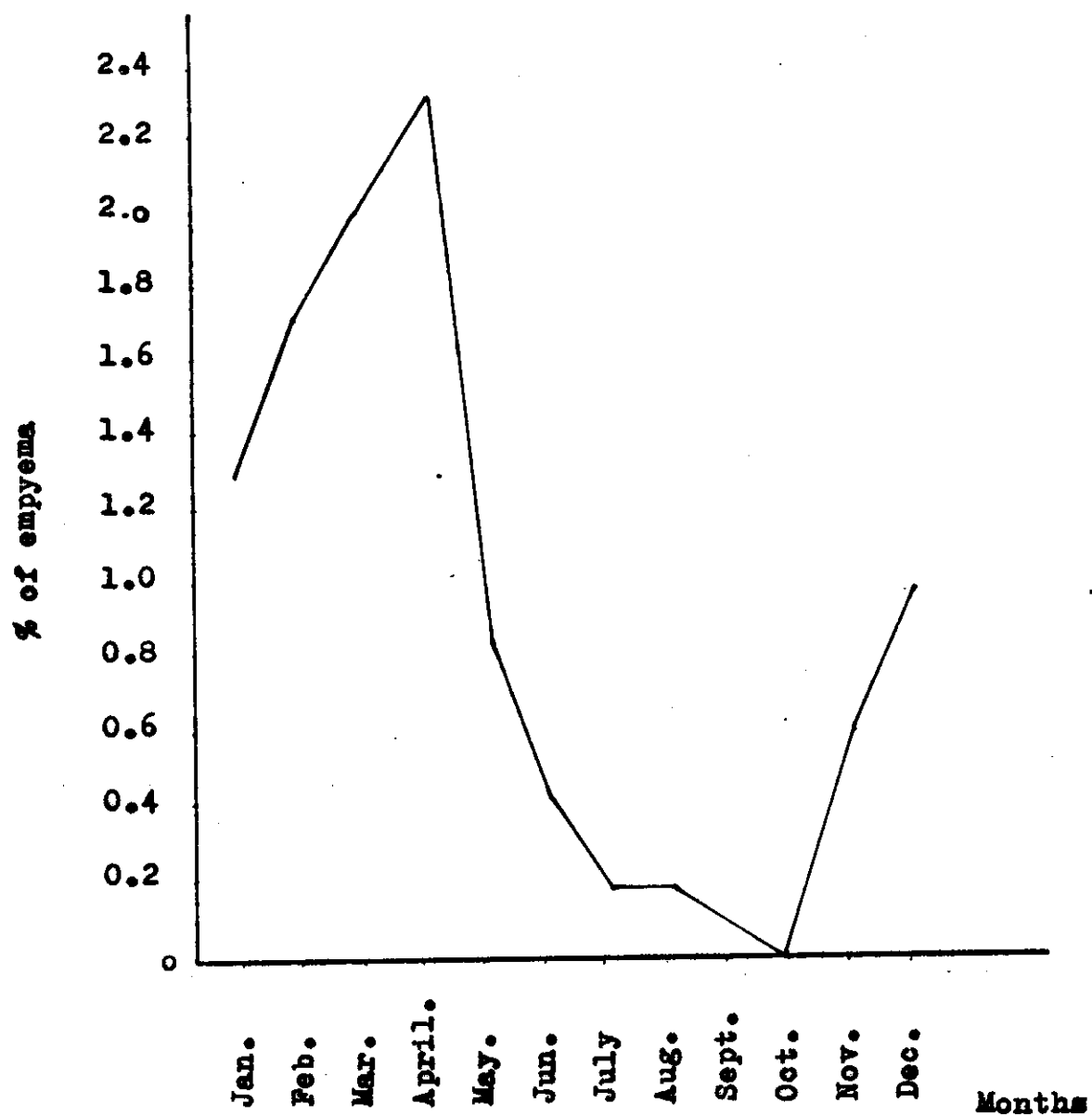


Fig. (2) : Calender incidence of empyema in the years of study.

Age groups (years) Sex	0 - 2 y		2 - 6 y		6 - 12y		Total	
	no. of Cases	%	no. of Cases	%	no. of Cases	%	no. of Cases	%
- Male	23	23	27	27	12	12	62	62
- Female	22	22	14	14	2	2	38	38
- Total	45	45	41	41	14	14	100	100

Table (4) : Sex and age distribution among 100 patients with empyema

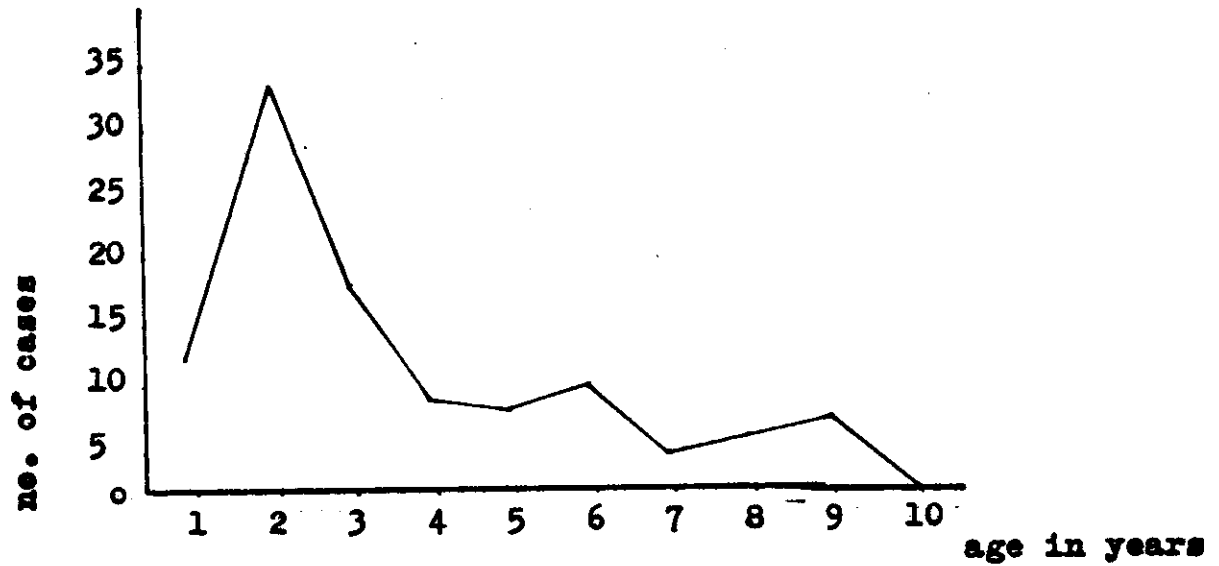


Fig. (3) : Age distribution among 100 patients with empyema.

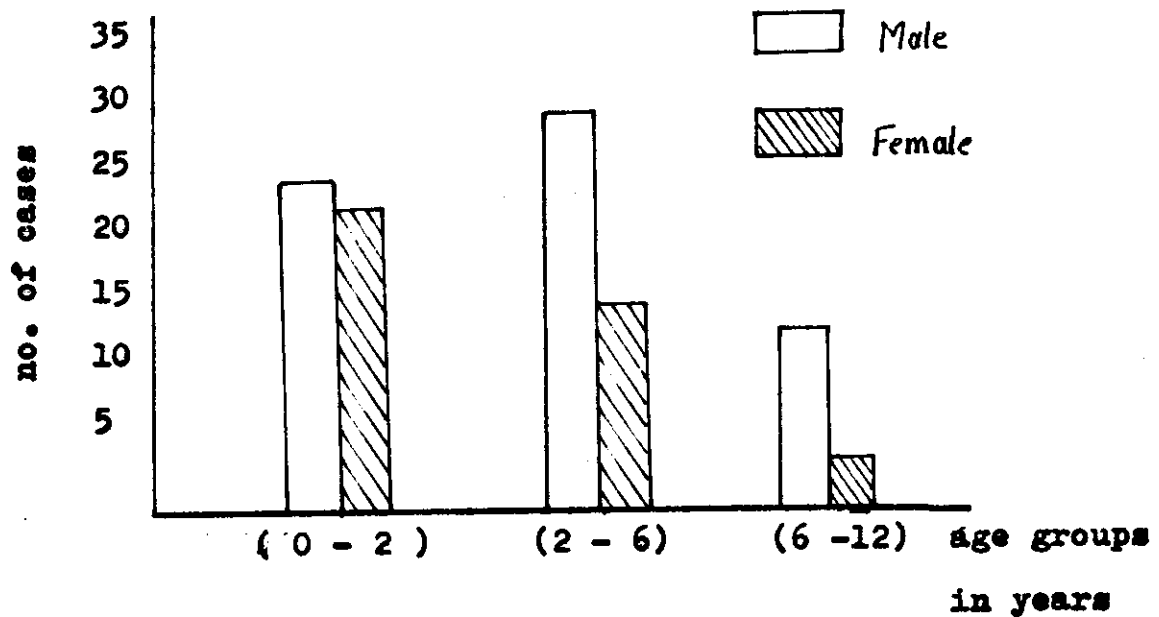


Fig. (4) : Sex distribution in different age groups among 100 patients with empyema.

Duration of symptoms : ranged from 7 days to 30 days with a mean of 13 days			
Onset :	Acute	81 Cases	81 %
	Gradual	19 Cases	19 %
Course : Was progressive for all cases.			
Previous treatment:	+	66 Cases	66 %
	-	34 Cases	34 %

Table (5) : Present history among 100 patients with empyema.

Symptoms	No. of Cases	%
- Respiratory distress (dyspnea)	92	92
- Cough	89	89
- Fever	60	60
- Grunting respiration	53	53
- Loss of weight	22	22
- Anorexia	21	21
- Chest pain	12	12
- Cyanosis	11	11

Table (6) : Frequency of symptoms among 100 patients with empyema

- | |
|------------------------------------|
| 1 - Respiratory distress (dyspnea) |
| 2 - Cough |
| 3 - Fever |
| 4 - Grunting respiration |

Table (7) : Commonest symptoms
among 100 patients
with empyema.

- | |
|--------------------|
| - Past history . |
| - Immunization . |
| - Family history . |
| - Social history . |

Table (8) : Other histories to be asked

Signs encountered at time of admission (i.e. before treat.)	No. of Cases	%
- Fullness of the intercostal spaces on the effected side	59	59
- Restriction of respiratory movements on the effected side	100	100
- Tracheal displacment to the other side	63	63
- Dullness on the affected side	100	100
- Respiratory sounds on the affected side:-		
- diminished ;	78	78
- absent ;	22	22
- Adventitious sounds - on both sides	47	47
- on the affected side	13	13
- Side affected : - Left ;	60	60
- Right ;	40	40
- Heart : - Congenital defect	1	1
- heart failure	3	3
- Other associated conditions :- hepato- splenomegally	6	6
- Kwash .	3	3
- marasmus	2	2
- positive tubercutin test	2	2

Table (9) : Frequency of signs among 100 patients
with empyema

- 1 - Restriction of respiratory movements on the affected side
- 2 - Dullness on the affected side
- 3 - Diminished to absent respiratory sounds on the affected side
- 4 - Tracheal displacement to the other side.

Table (10) : Commonest signs among 100 patients with empyema..

Item	No. of Cases	%
- Obliteration of costophrenic and cardiophrenic angles	3	10
- Small empyema	3	10
- Large empyema	27	90
- Tracheal shift to the other side	27	90
- Fluid level (pyopneumothorax)	9	30

Table (11) : Radiological findings among 30 patients with empyema

Item	No. of Cases	%
Appearance :- serosanguinous and thin	3	10
- yellowish and thin	17	57
- yellowish and thick	7	23
- greenish and thick	3	10
Culture : - bacterial growth	9	30
- -ve	21	70

Table (12) : Results of examination of pleural fluid among 30 patients with empyema

Item \ Range	From	To	Mean
- Hemoglobin concentration (gm/ 100 ml.)	4.5	9	8
- R.B.Cs count	1.700.000	3.800.000	3.000.000
- Total leucocytic count	7.000	21.000	14.000
- Polymorphnuclears %	72%	81%	76.5%

Table (13) : Blood picture of 30 patients with empyema.

- Clinical course.
- Physical signs .
- Radiological examination .
- Thoracentesis (aspiration of pus
and culture) .
- Blood picture .

Table (14) : Methods of diagnosis of
empyema.

- Multiple aspiration + intrapleural instillation of
crystalline penicillin, Or Closed tube drainage
with under water seal .
- Systemic antibiotics.
- Supportive treatment - tonics
 - cough mixtures
 - oxygen
 - blood transfusion
 - good nutrition
- Physiotherapy : respiratory & chest exercises.

Table (15) : Lines of treatment of empyema.

Fate of the case	No. of Cases
- Recovery (clinically & radiologically) :	66 (78.8%)
- Referred to other hospitals (complicated) :	10
- Discharge on request :	8
. admission to other hospitals	2
. death at home	6
- Complicated :-	9
. pyopneumothorax	6
. empyema necessitatis	2
. multiple pyaemic abscess	1
- Death :-	7 (8.2 %)
. below 2 years age	5
. above 2 years age	2

Table (16) : The clinical course of the 85 cases treated
by the multiple aspiration method.

- (The duration of admission ranged from 16 to 43 days
with a mean of 26 days)

	Multiple aspiration	Closed tube drainage
No. of Cases under treatment	15	15
Duration of treatment(mean)	25 days	36 days
Recovery at hospital	12 (80%)	14 (93.4%)
Complications	3	1
Death	1 (6.6%)	1 (6.6 %)

**Table (17) : The clinical course of the two groups
treated in the last year.**