

Effect of Corticosteroids on the clinical course of severe Community-Acquired Pneumonia.

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I. Introduction

- Community-Acquired Pneumonia (CAP) is a common and serious infectious disease associated with high morbidity and mortality.
- It is the sixth leading cause of death and the most common infectious cause of death worldwide.
- Despite effective antibiotic therapy, about 12–36% patients admitted to the intensive care unit (ICU) with severe CAP die within a short time.

II. Materials And Methods

- Study design -Hospital based Cross sectional study.
- Study setting -Government Hospital for chest and communicable diseases, Visakhapatnam, Andhrapradesh.
- Sample size - A total of 60 patients were enrolled based on the inclusion and exclusion criteria.

Inclusion criteria:

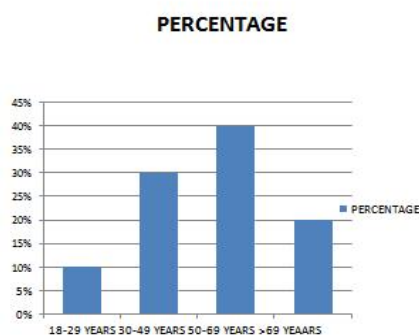
- 1) clinical symptoms suggestive of community acquired pneumonia: Acute onset of cough (with or without sputum, fever, pleuritic chest pain, dyspnea)
- 2) consolidation on chest radiograph.
- 3) Age 18 years or older.

Exclusion criteria: presence of severe immunosuppression (HIV infection, use of immunosuppressants), malignancy, pregnancy or Breast feeding

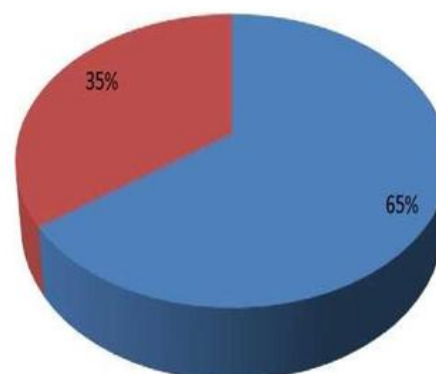
- The Antibiotic Alone group (n=30) given antibiotic injections for 5 days.
- The steroid with Antibiotic group (n=30) given injection Methyl prednisolone 1mg /kg body weight for 5 days along with antibiotics.

III. Results

AGE DISTRIBUTION

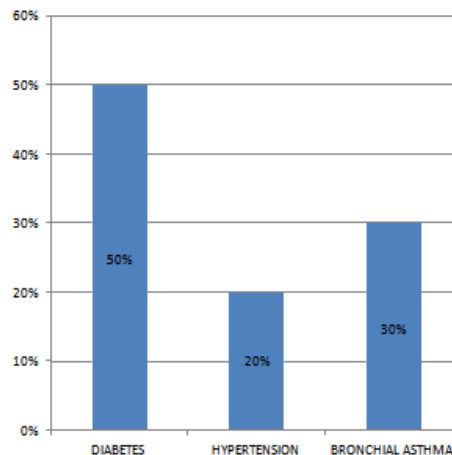


SEX DISTRIBUTION

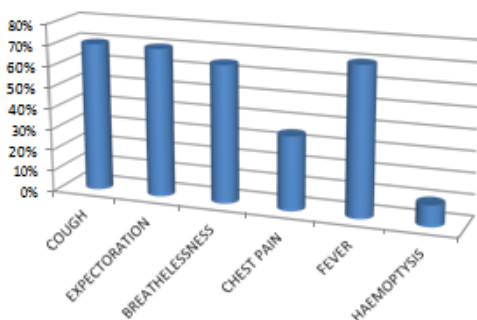


CO MORBIDITIES

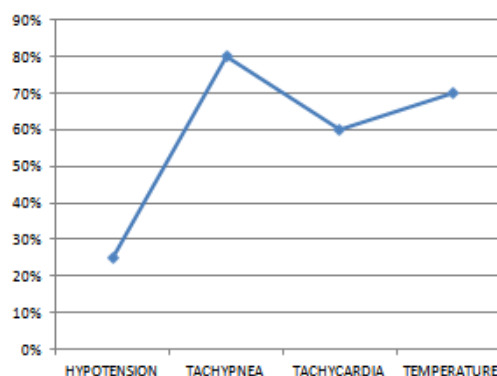
Co morbidities	Total No of patients 60
DIABETES	30(50%)
HYPERTENSION	10(20%)
BRONCHIAL ASTHMA	20(30%)



SYMPTOMS

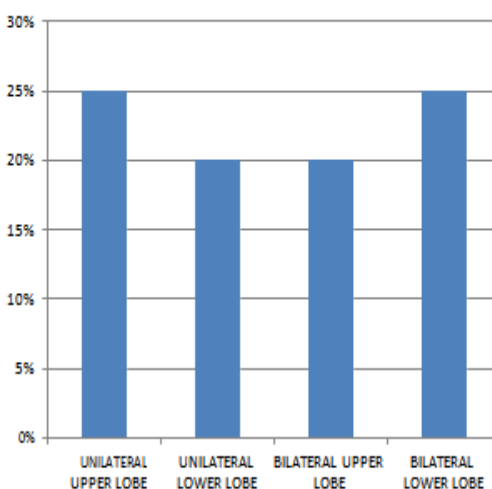


SIGNS



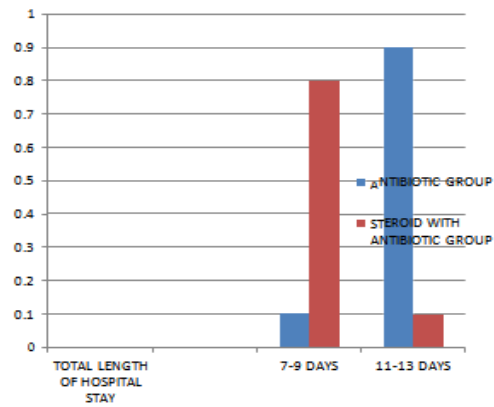
CHEST X RAY FINDINGS

X RAY FINDINGS	PERCENTAGE
U/L UPPER LOBE	25%
U/L LOWER LOBE	20%
B/L UPPER LOBE	20%
B/L LOWER LOBE	35%



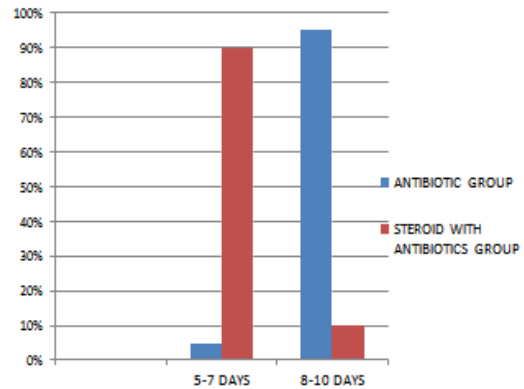
TOTAL LENGTH OF HOSPITAL STAY

TOTAL LENGTH OF HOSPITAL STAY	ANTIBIOTIC GROUP ONLY(N=30)	STERIOD ANTIBIOTIC GROUP(30)
7-9 DAYS	10%(n=5)	80%(n=20)
11-13 DAYS	90%(n=25)	20%(n=10)



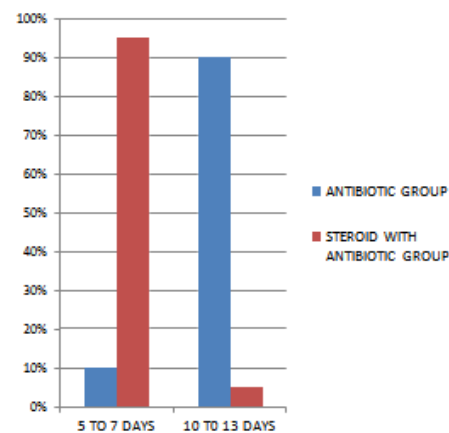
LENGTH OF ICU STAY

LENGTH OF ICU STAY	ANTIBIOTIC GROUP ONLY (N=30)	STERIOD ANTIBIOTIC GROUP(N=30)
5-7 DAYS	10%(n=5)	90%(n=25)
8-10 DAYS	90%(n=25)	10%(n=5)



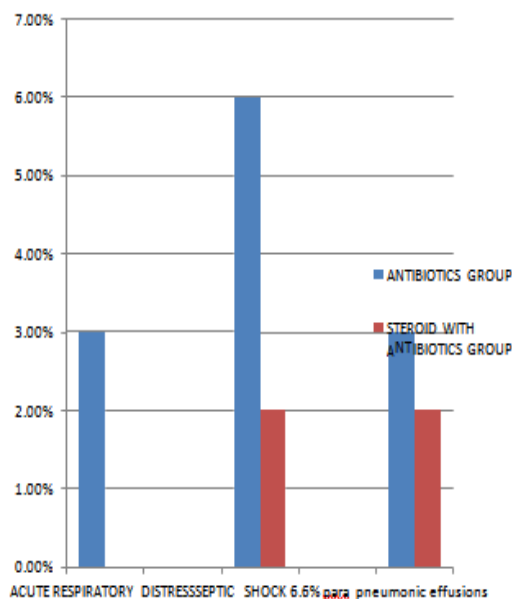
DURATION OF NON INVASIVE VENTILATION

DURATION	ANTIBIOTICS GROUP(30)	STERIOD WITH ANTIBIOTIC GROUP(30)
5 TO 7 DAYS	10%(n=10)	95%(n=25)
10 -13 DAYS	90%(n=25)	5%(n=5)



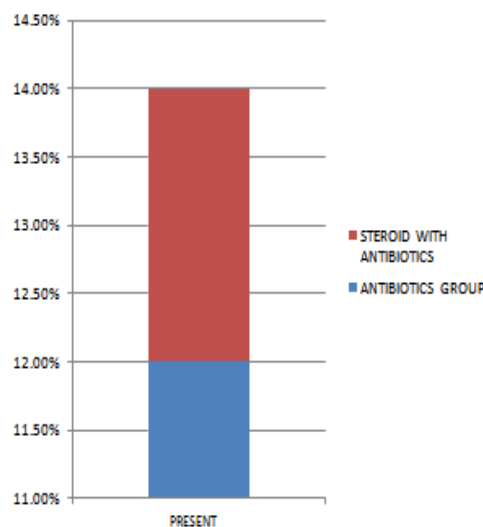
COMPLICATIONS

COMPLICATIONS	ANTIBIOTICS GROUP(N=30)	STERIOD WITH ANTIOTI GROUP(N=30)
ARDS	3%	0%
SEPTIC SHOCK	6%	2%
PARAPNEUMONIC EFFUSION	3%	1%



MORTALITY

MORTALITY	ANTIBIOTICS GROUP Only (N=30)	STERIOD WITH ANTIOTI GROUP(N=30)
PRESENT	12%(n=4)	2%



IV. Discussion

- Community acquired pneumonia more common in age group 50-69 years(40%).
- Community Acquired pneumonia clinically presents with Expectoration (70%),Fever (70%),Breathelessness(65%),Chest pain (35%) & Haemoptysis (10%)
- Signs elicited in severe CAP are Tachpnoea (80%), Temperature (70%), Tachycardia (60%), Hypotension (25%).
- In My study community acquired pneumonia commonly affects upperlobe unilateral (25%),Bilateral lower lobe (35%).
- In My study Total length of hospital stay in steroid group is 7-9 days(80%),in Antibiotic group 11-13 days(90%)

- Length of ICU stay in Steroid with Antibiotic group is 5- 7 days(90%),in Antibiotic group 8-10 days(90%) in our study
- Duration of Non invasiveventilation is 5-7 days(95%) in Steroid with Antibiotic group ,10-13 days (90%) in Antibiotic group .
- Complications like ARDS,Septic shock ,parapneumonic effusions more common in Antibiotic group compared to Steroid group in my study.
- Mortality rate 12% in Antibiotic alone group,2% in Steroid with Antibiotic group.

V. Conclusion

- The Length of hospital stay in severe Community acquired pneumonia treated with Steroids with Antibiotics is low compared to Antibiotics alone .
- The Length of ICU stay Community acquired pneumonia treated with Steroids with Antibiotics is low compared to Antibiotics alone.
- Complications like ARDS,Septic shock more common in Antibiotic group in our study
- Duration of Noninvasive ventilation is low in Steroid with Antibiotics group compared to Antibiotic group only in severe Community Acquired pneumonia.
- Mortality rate is low in Steroid with Antibiotics group compared to Antibiotic group in our study

References

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