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It is impossible to overemphasize the importance of lung diseases in the overall perspective of pathology and clinical medicine. Primary respiratory infections, such as bronchitis, bronchopneumonia and other forms of pneumonia, are common place in clinical and pathological practice. In this day of cigarette smoking and air pollution, chronic bronchitis and emphysema have become rampant, affecting large segments of the total population. Moreover, the lungs are secondarily involved in almost all forms of terminal diseases, so that at virtually every autopsy, some degree of pulmonary edema, atelectasis or bronchopneumonia is found.

A total of 55 autopsies were conducted in the mortuary of M.L.B. Medical college and Hospital, Jhansi. Lung specimens were also removed from a case referred from Military Base Hospital, Cantt. Jhansi. Victims were mostly males as compared to females with an incidence ratio of 1.2:1. Most of the cases belonged to third and fifth decade as well as cases from rural areas predominated over urban areas with an incidence ratio of 1.4:1. These findings of ours could not be compared due to paucity of such information in literature.

The time interval between death and autopsy in general was 20 hours. The cause of death in most of the cases
autopsied was accidental whereas in some cases, cause of
death was in the form of burn injuries, poisoning and
unexplained medical illness.

Lung specimens removed at autopsy, on gross
examination were found grayish black in color as well as it
was reddish brown in some cases. So as the cut surface, in
most of the cases, it was grayish black which was might be
due to carbon deposition in urban dwellers. Cyst and
calcification were also observed. The above gross findings
again could not be compared due to unavailability of such
kind of data.

Commonest histopathological lesions observed were
pulmonary congestion and pulmonary edema followed by
pneumonic consolidation, emphysema, carbon pigmentation
microthrombi, bronchiolar epithelial change, chronic
bronchitis, bronchopneumonia, thickened alveolar septa,
calcification of vessels, tuberculosis and pulmonary alveolar
fibrosis.

As regard pulmonary congestion which was observed in
variable severity ranging from mild to severe congestion in
large number of cases. According to Parikh (1992), pulmonary
congestion has been common finding on postmortem
examination. Pulmonary congestion was more marked in
bodies received from rural areas as compared to urban cases
which can be explained in certain forms on the basis of duration distance or time interval between postmortem and death. Considering congestion in relation to age, congestion has been common finding in persons after the age of 30 years which was predominant in male with a male to female ratio of 1.3:1. Such findings and observations could not be compared thoroughly due to paucity of such information in the literature.

Pulmonary edema of variable severity has been a consistent finding in large percentage of cases in our present study in the tune of 87.27%. Similar higher incidence has been reported by Agarwal et al (1983) in road traffic accident cases. Here again pulmonary edema was more commonly seen in persons after the age of 30 years, which was more preponderant in male with a male to female ratio of 1.5 : 1.

Pneumonic consolidation has been frequently encountered in approximately 52.72% cases with a high incidence in third decade and more prevalent in males as compared to females with a male to female ratio of 1.2:1. Present study shown bronchopneumonia in a good percentage of cases (12.73%), commonly afflicting persons in third and fourth decade of life and has been more common in females with a female to male ratio of 1.3:1. Bronchopneumonia finding was observed more frequently in urban as compared to rural areas. These findings were in accordance with Park
(1997) who has reported similar incidence of pneumonia (10-20%) in developing countries. Robbins (1989) stressed bronchopneumonia as a common postmortem finding in his series. According to Mac Gee W (1993), bronchopneumonia is very fetal in geriatric population.

Emphysema as a histopathological finding was encountered in 34.54% cases with male to female ratio of 2:1, predominating in rural as compared to urban population. Considering emphysema in relation to age, it was commonly observed in fourth and fifth decade of life. This can be easily explained on the basis of condition prevailing in rural population and also in urban population in high percentage. Our findings are in close accordance with the findings of Robbins (1989), and Anderson (1996) who has stressed that prevalence and severity of emphysema increases with age and greater in men than women. Anderson (1996) reported 20 - 100% prevalence and Thurlbeck (1976) reported 50% incidence of emphysema at autopsy.

In present study chronic bronchitis has encountered in 14.54% cases with male preponderance as a male to female ratio of 7:1, predominant in urban as compared to rural area. Chronic bronchitis was mostly observed in persons in fifth decade. The present findings are very similar to that of Robbins (1989), Davidson (1995) and Anderson (1996). Thurlbeck (1976) reported 10-25% of the urban adult
population have chronic bronchitis, may be due to community air pollution and industrial causes.

Bronchiolar epithelial change was observed in 25.45% cases which was mainly present in the persons below 40 years of age. In younger age group, bronchiolar epithelial change was observed due to burn injuries and in later life, it may be due to smoking habits, air pollution and industrial causes. These findings and observations could not be compared because of unavailability of such findings in literature.

Increase carbon pigmentation has been also encountered in good percentage of cases (25.45%), with male predominance having male to female ratio of 1.3:1, mostly seen in urban population than rural area. Maximum number of cases were seen in fifth decade of life. These findings and observations are in accordance with Robbins (1989), who stressed that carbon pigmentation is more common in urban dwellers due to air pollution and industrialization.

As regarding tuberculosis, it was observed in 7.27% cases with female predominance having female to male ratio of 3:1, and predominantly encountered in rural areas as compared to urban population. Most of the cases were observed in third decade followed by fifth decade of life. These findings are in accordance with Park (1997) who reported that
tuberculosis is more common among rural areas, in elderly males and in females below 35 years age. In present study tuberculosis was found in 7.27% cases while according to W.H.O. survey (1997), for India prevalence rate of tuberculosis is 30% and incidence rate is 1-2%. The difference is because our study is autopsy study and we have studied less number of cases.

Microthrombi were observed mostly in persons dying of burn injuries, predominated in males with an incidence of 25.45%. According to Sevitt S. (1966), presence of microthrombi as well as macrothrombi are common findings in lung in persons dying of burn injuries which can be also a cause of death in such cases.

Thickened alveolar septa was observed in 12.73% cases with male predominance having male to female ratio of 1.3:1, mostly in fourth decade of life. These findings again could not be compared due to lack of such information in the literature.

In our study calcification was observed in 9.09% cases with female predominance with a female to male ratio of 1.5:1, mostly in seventh and fifth decade of life. These findings are in accordance with Anderson (1996), that lung is one of the favoured sites of calcification.

Regarding pulmonary alveolar fibrosis, which was found in 7.27% cases with male predominance as a male to female
ratio of 3:1. It was mostly observed in persons after the age of 50 years. These findings are very similar to Robbins (1989) and Anderson (1996) who stressed that pulmonary fibrosis can occur at any age but mostly occurs in middle aged or older persons.

The present study has been a small one comprising few cases in a short period of time and hence the limited findings were observed. It is suggested that in future, such kind of study should be undertaken in larger perspective including large number of cases so that the findings and observations can be of much utility and use and the study should have become more fruitful.