Archives of Medicine©
14 (3) 2022 : 001-002 • IMAGE ARTICLE

Ring around the artery sign- A rare indicator of pneumomediastinum in COVID-19

Tukaram Bolla[1], Neha Sharma[1], Ashish Bhalla[1]*, Shubhmohan Singh[2], Manoj K Goyal[3], Vivek Kumar[3]
[1]Department of Internal Medicine, Post Graduate Institute of Medical Education and Research, Chandigarh, India
[2]Department of Psychiatry, Post Graduate Institute of Medical Education and Research, Chandigarh, India
[3]Assistant Professor, Department of Nephrology, Postgraduate Institute of medical education and Research, Chandigarh India

INTRODUCTION

A 68 years old gentleman presented with high grade fever and abdominal pain for one week. He had COVID 19 six weeks back with post-COVID lung fibrosis and was on home oxygen therapy. He was hypoxic with SpO2 of 93% on venturi-mask with FIO2 of 0.4 and Blood pressure of 80/40 mmHg. Total leucocyte count was elevated to 22 × 109/L. X-ray chest revealed air lucency around the pulmonary trunk (Ring around the artery Sign) **(Fig 1).** Diagnosis of post-COVID lung fibrosis and pneumomediastinum with superimposed bacterial pneumonitis with sepsis was made. Subsequent computed tomographic scan of chest confirmed pneumomediastinum. He was given oxygen, antibiotics, and supportive care. He improved in 72 hours and could be discharged in hemodynamically stable condition. Spontaneous pneumomediastinum in absence of mechanical ventilation is a rare complication of COVID-19 pneumonia, likely related to damage and rupture of the alveolar membrane [1,2]. Ring around the artery sign results from the accumulation of air around the intramediastinal segment of the pulmonary artery on the right side and is reported rarely as the main radiological sign of pneumomediastinum [3]. Our case illustrates the importance of astute observation of the X-ray chest in COVID 19.

FUNDING

This research received no external funding.

CONFLICTS OF INTEREST

The authors declare no competing interests.

All authors declare that the material has not been published elsewhere, or has not been submitted to another publisher.

DATA AVAILABILITY

Authors declare that all related data are available concerning researchers by the corresponding author's email.

ACKNOWLEDGMENTS

None.

Address for correspondence:

Dr. Ashish Bhalla
Department of Internal Medicine, Post Graduate Institute of Medical Education and Research, Chandigarh, India
E-mail: bhalla.chd@gmail.com

Word count: 198 **Tables:** 00 **Figures:** 00 **References:** 03

Received: 25 January, 2021, Manuscript No. ipaom-22-12668; **Editor Assigned:** 28 January, 2022, Pre QC No. P-12668; **Reviewed:** 17 February, 2022, QC No. Q-12668; **Revised:** 22 February, 2022, Manuscript No. R-12668; **Published:** 10 March, 2022.

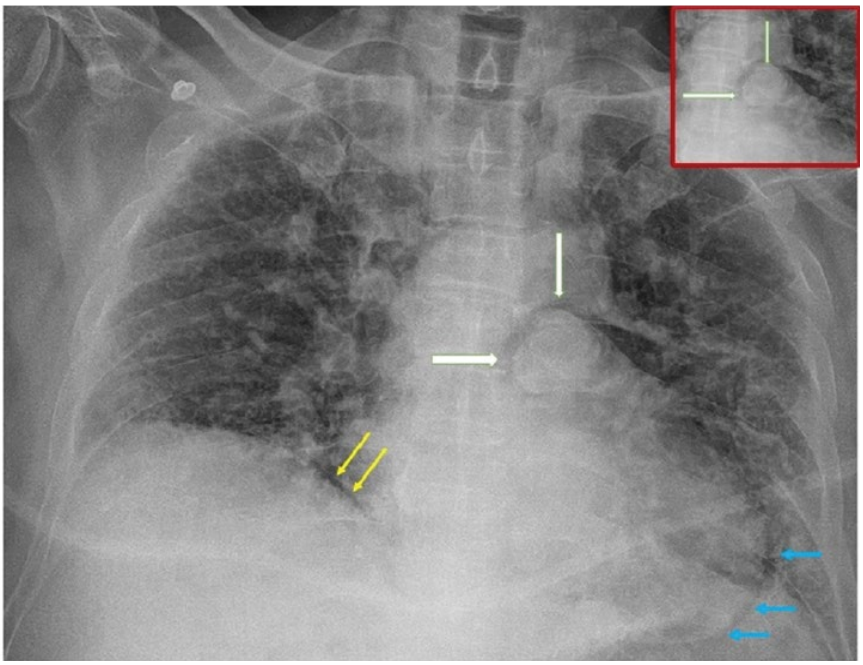

Fig. 1. X-ray chest revealed air lucency around the pulmonary trunk (Ring around the artery sign).

REFERENCES

1. **Mohan V, Tauseen RA.** Spontaneous pneumomediastinum in COVID-19. *BMJ Case Rep* CP. 2020;13:e236519.
2. **Romano N, Fischetti A, Melani EF**. Pneumomediastinum related to COVID-19 pneumonia. *Am J Med Sci.* 2020;360:e19-20.
3. **Zylak CM, Standen JR, Barnes GR, et al.** Pneumomediastinum revisited. *Radiographics*. 2000;20:1043-1057.