

Supplementary Table S1. The quality assessment and overall appraisal of included case reports.

ID	Country	Study design	Were patient's demographic characteristics clearly described?(Yes,No , Unclear, Not applicable)	Was the patient's history clearly described and presented as a timeline?(Yes,No , Unclear, Not applicable)	Was the current clinical condition of the patient on presentation clearly described?(Yes,No , Unclear, Not applicable)	Were diagnostic tests or assessment methods and the results clearly described?(Yes,No , Unclear, Not applicable)	Was the intervention(s) or treatment procedure(s) clearly described?(Yes,No , Unclear, Not applicable)	Was the post-intervention clinical condition clearly described?(Yes,No , Unclear, Not applicable)	Were adverse events (harms) or unanticipated events identified and described?(Yes,No , Unclear, Not applicable)	Does the case report provide takeaway lessons?(Yes,No , Unclear, Not applicable)	Overall appraisal : (Include, Exclude, Seek further info)
[1]	USA	Case Report	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Include
[2]	Germany	Case Report	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Include
[3]	USA	Case Report	Yes	Yes	Yes	Yes	Not applicable	Not applicable	No	unclear	Include
[4]	USA	Case Report	Yes	Yes	Yes	Yes	Yes	unclear	No	Yes	Include
[5]	USA	Case Report	Yes	Yes	Yes	Yes	Yes	unclear	No	Yes	Include
[6]	USA	Case Report	No	unclear	No	Yes	Yes	No	No	Yes	exclude
[7]	Malaysia	Case Report	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Include

Supplementary Table S2. The quality assessment and overall appraisal of the included case series.

I D	C ou nt ry	S t u d y d e s i g n	Was the hypothesi s/aim/obj ective of the study clearly stated? (Yes,Parti al,No)	Was the study conduc ted prospe ctively ? (Yes,u nclear, No)	Were the cases collect ed in more than one centre ? (Yes,u nclear, No)	Were patient s recruit ed consec utively ? (Yes,u nclear, No)	Were the charac teristic s of the patient s includ ed in the study descri bed? (Yes,P artial, No)	Were the eligibil ity criteri a (i.e. includi on and exclusi on criteri a) for entry into the study clearly stated? (Yes,P artial, No)	Did patients enter the study at a similar point in the disease?(Yes,uncle ar,No)	Was the interve ntion of interes t clearly descri bed? (Yes,P artial, No)	Were additio nal interve ntions (co- interve ntions) clearly descri bed? (Yes,P artial, No)	Were releva nt outco me measu res establi shed a priori? (Yes,P artial, No)	Were outco me assesso rs blinde d to the interve ntion that patient s receive d? (Yes,u nclear, No)	Were the releva nt outco mes meas ured using appro priate object ive/su bjecti ve meth ods? (Yes,P artial, No)	Wer e the relev ant outc ome meas ures made befo re and after the inter venti on? (Yes, uncl ear, No)	Wer e the stati stica l tests used to asses s the relev ant outc omes appr opri ate? (Yes, uncl ear, No)	Was follo w-up long enou gh for impo rtant even ts and outc omes to occu r? (Yes, uncl ear, No)	Wer e losse s to follo w-up repo rted ? (Yes, uncl ear, No)	Did the stud y provi ded esti mate s of rand om vari abili ty in the data anal ysis of relev ant outc ome s? (Yes, Part ial,N o)	Wer e the adve rse even ts repo rted ? (Yes, Part ial,N o)	Wer e the conc lusio ns of the stud y supp orte d by resul ts? (Yes, uncl ear, No)	Wer e both com peti ng inter ests and sour ces of supp ort for the stud y repo rted ? (Yes, Part ial,N o)
[8]	U S A	C ase S erie s	Yes	No	No	Unclea r	Yes	No	Yes	Yes	Yes	No	No	Yes	No	Uncl ear	Yes	No	No	No	Yes	Yes
[9]	U S A	C ase S erie s	Yes	No	No	Unclea r	Yes	No	Unclear	Yes	Unclea r	No	No	Yes	No	Uncl ear	Uncl ear	No	No	No	Yes	Yes

 1 0 	U S A	C as e S er ie s	Yes	No	Unclea r	Unclea r	Yes	No	Yes	Yes	Yes	No	No	No	Yes	No	Uncl ear	Yes	No	No	No	Yes	Yes
----------------	-------------	------------------------------------	-----	----	-------------	-------------	-----	----	-----	-----	-----	----	----	----	-----	----	-------------	-----	----	----	----	-----	-----

 1 1 	USA	Case Serie s	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Uncl ear	Uncl ear	No	No	No	Yes	Yes
----------------	-----	--------------------	-----	----	----	-----	-----	-----	-----	-----	-----	----	----	-----	----	-------------	-------------	----	----	----	-----	-----

||
||
||

References:

- [1] Wieckowska J, Assaad U, Aboudan M. Pneumothorax secondary to vaping. *Respir Med Case Rep.* 2021 May 5;33:101421. doi: 10.1016/j.rmcr.2021.101421. PMID: 34401268; PMCID: PMC8348149.
- [2] Borchert DH, Kelm H, Morean M, Tannapfel A. Reporting of pneumothorax in association with vaping devices and electronic cigarettes. *BMJ Case Rep.* 2021 Dec 17;14(12):e247844. doi: 10.1136/bcr-2021-247844. PMID: 34920999; PMCID: PMC8685946.
- [3] Bonilla A, Blair AJ, Alamro SM, Ward RA, Feldman MB, Dutko RA, Karagounis TK, Johnson AL, Folch EE, Vyas JM. Recurrent spontaneous pneumothoraces and vaping in an 18-year-old man: a case report and review of the literature. *J Med Case Rep.* 2019 Sep 9;13(1):283. doi: 10.1186/s13256-019-2215-4. PMID: 31495337; PMCID: PMC6732835.
- [4] Sharma M, Anjum H, Bulathsinghala CP, Buch M, Surani SR. A Case Report of Secondary Spontaneous Pneumothorax Induced by Vape. *Cureus.* 2019 Nov 4;11(11):e6067. doi: 10.7759/cureus.6067. PMID: 31827996; PMCID: PMC6890157.
- [5] Deskins SJ, Luketich SK, Al-Qatarneh S. Recurrent spontaneous pneumothorax in a 15-year-old female associated with electronic cigarettes. *Pediatr Pulmonol.* 2022 Oct;57(10):2568-2570. doi: 10.1002/ppul.26058. Epub 2022 Jul 29. PMID: 35856236.
- [6] Wu M, Mohammed TH. Electronic Cigarette or Vaping Product Use-associated Lung Injury: Diffuse Alveolar Damage. *Radiol Cardiothorac Imaging.* 2020 Apr 2;2(2):e200027. doi: 10.1148/ryct.2020200027. PMID: 33778558; PMCID: PMC7978002.
- [7] Khuan WH, Wong CK. Vaping - A Precipitating Factor of Pneumothorax in A Smoker. *Malaysian Journal of Medicine and Health Sciences* (2023) 19(1):366-368. doi:10.47836/mjmhs19.1.46
- [8] Skertich NJ, Sullivan GA, Madonna MB, Shah AN.. *Journal of Pediatric Surgery Case Reports.* Elsevier; 50:101305. <https://doi.org/10.1016/j.epsc.2019.101305>
- [9] Ali M, Khan K, Buch M, Ramos-Ramirez M, Sharma M, Patel S, Choudhury S, Anjum H, Khan A, Surani S. A Case Series of Vaping-Induced Lung Injury in a Community Hospital Setting. *Case Rep Pulmonol.* 2020 Jan 31;2020:9631916. doi: 10.1155/2020/9631916. PMID: 32082682; PMCID: PMC7013298.
- [10] Ashraf O, Nasrullah A, Karna R, Alhajhusain A. Vaping associated spontaneous pneumothorax - A case series of an enigmatic entity! *Respir Med Case Rep.* 2021 Oct 23;34:101535. doi: 10.1016/j.rmcr.2021.101535. PMID: 34745871; PMCID: PMC8551642.

[11] Reddy A, Jenssen BP, Chidambaram A, Yehya N, Lindell RB. Characterizing e-cigarette vaping-associated lung injury in the pediatric intensive care unit. *Pediatr Pulmonol*. 2021 Jan;56(1):162-170. doi: 10.1002/ppul.25086. Epub 2020 Oct 7. PMID: 32970368; PMCID: PMC8008480.