JOURNAL WATCH

C Patterson, MD
Royal Papworth Hospital, Cambridge, UK

October 2019
Edited by Jamie Todd, MD PhD

Layden et al. Pulmonary Illness Related to E-Cigarette Use in Illinois and Wisconsin — Preliminary Report.

NEJM. September 6, 2019 DOI: 10.1056/NEJMoa1911614

Study highlights

Public health investigation. Cases identified using CDC definition of 30 Aug 2019.

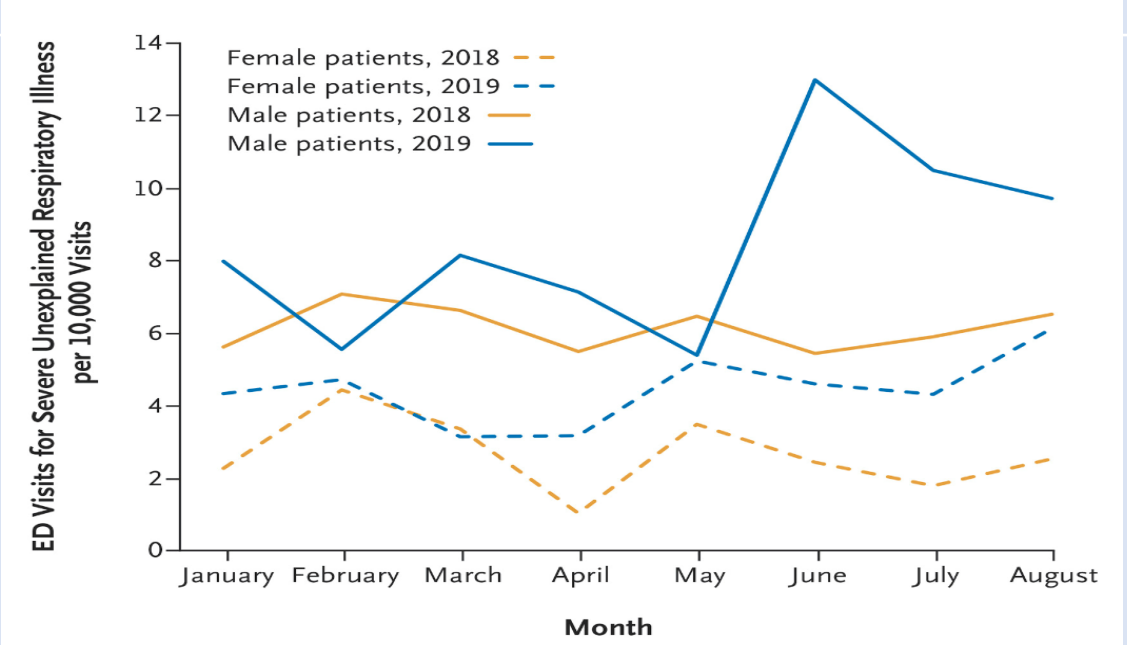
53 patients across two States, 83% male, median age 19 years.

Range of products/devices used.
84% reported use of tetrahydrocannabinol.

Presenting features:

- Symptoms: respiratory (98%), GI (81%), constitutional (100%)
- Bilateral lung infiltrates in 100% (part of the case definition).

Central figure



Outcomes:

- 94% hospitalized, 32% required mechanical ventilation, one death reported

CDC Clinical Health Advisory and ATS Health Alerts have now been issued to highlight risk of Vaping Associated Lung Illness

Reviewer's comments

Limitations:

Definitive pathology yet to be established; cases may represent a range of processes

Strengths:

First case series to describe a large cluster of temporally related pulmonary illnesses linked to the use of e-cigarette products

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C Patterson, MD
Royal Papworth Hospital, Cambridge, UK

October 2019
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Levy et al. The impact of first untreated subclinical minimal acute rejection on risk for chronic lung allograft dysfunction or death after lung transplantation.

Am J Transplant. 2019 Aug 9. doi: 10.1111/ajt.15561. [Epub ahead of print]

Study highlights

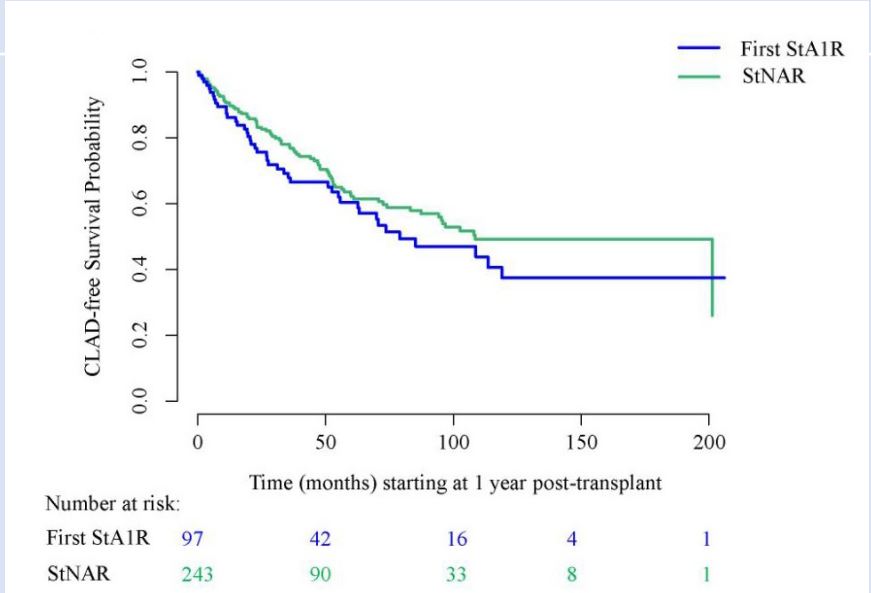
Management of minimal acute cellular rejection remains controversial

962 adult patients undergoing first, bilateral lung transplant

First spirometrically-stable A1 rejection (StA1R) compared to time-matched spirometrically-stable no ACR (StNAR)

Risk of CLAD or death was assessed using univariable and multivariable Cox Proportional Hazards models

Central figure



After adjusting for recipient age, sex, native lung disease, CMV mismatch, and transplant era:

CLAD: HR=1.15, CI 0.84-1.58, P=0.37

Death: HR=0.80, CI 0.57-1.12, P=0.19

No significant difference in risk of CLAD or death/retransplant in patients with a first StA1R compared to StNAR

Reviewer's comments

Limitations:

- Single centre study
- Applicability to centres with different surveillance protocols
- Potential unmeasured confounders

Strengths:

Largest study to date showing that, in clinically stable patients, a watchful waiting approach to first A1 ACR in the first-year post-transplant may be appropriate.

JOURNAL WATCH

C.T.Gan MD, PhD
University Medical Center Groningen, Groningen, The Netherlands

October 2019
Edited by Jamie Todd, MD PhD

Rafiroiu S. et al. Consequences of delayed chest closure in lung transplantation.

Ann Thorac Surg. 2019 Sep 14. doi: 10.1016/j.athoracsur.2019.08.016. [Epub ahead of print]

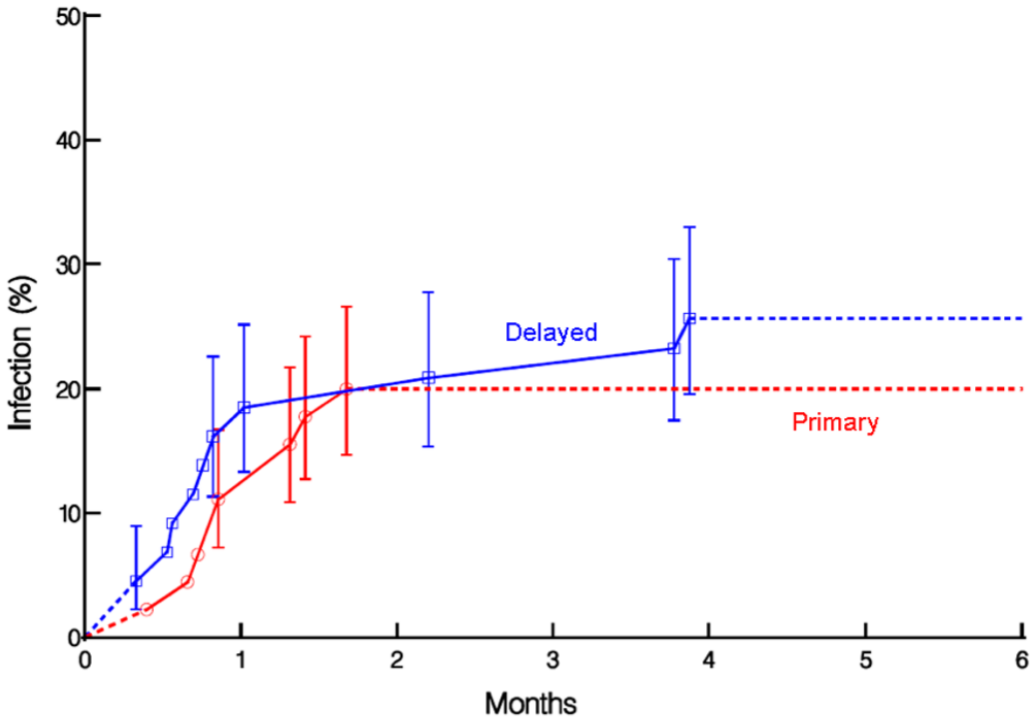
Study highlights

Single center retrospective study in 769 lung transplant patients (2009-2014). 47 (6%) required delayed chest closure

Propensity matched analysis shows that at 30 days wound infection and at 6 months composite infection rates were not different.

Delayed chest closure was associated with more severe primary graft dysfunction (39% vs. 17%, p = 0.044), longer hospital stay (median 61 vs. 25 days, p<0.001), and worse lung function at 6 years (p = 0.019) but survival was not affected.

Central figure



Reviewer's comments

Limitation:

Retrospective Analysis

Strengths:

Propensity matching for analysis

Conclusion:

Delayed chest closure in lung transplantation does not yield higher infection or worse long-term survival