

Titre: Prognostic value of interictal epileptiform discharges on routine EEG
Title: in adults with epilepsy.. Supplément

Auteurs: Émile Lemoine, Mezen Jemel, An Qi Xu, Jean-Daniel Tessier, Frédéric
Authors: Lesage, Dang K. Nguyen, & Elie Bou Assi

Date: 2025

Type: Article de revue / Article

Référence: Lemoine, É., Jemel, M., Xu, A. Q., Tessier, J.-D., Lesage, F., Nguyen, D. K., & Bou
Citation: Assi, E. (2025). Prognostic value of interictal epileptiform discharges on routine
EEG in adults with epilepsy. *Epilepsia*, 66(6), 2079-2088.
<https://doi.org/10.1111/epi.18318>

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Version: Matériel supplémentaire / Supplementary material
Révisé par les pairs / Refereed

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Document publié chez l'éditeur officiel

Document issued by the official publisher

Titre de la revue: *Epilepsia* (vol. 66, no. 6)
Journal Title:

Maison d'édition: Wiley
Publisher:

URL officiel: <https://doi.org/10.1111/epi.18318>
Official URL:

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Supplementary Material

Supplementary Figure 1: Directed Acyclic Graph

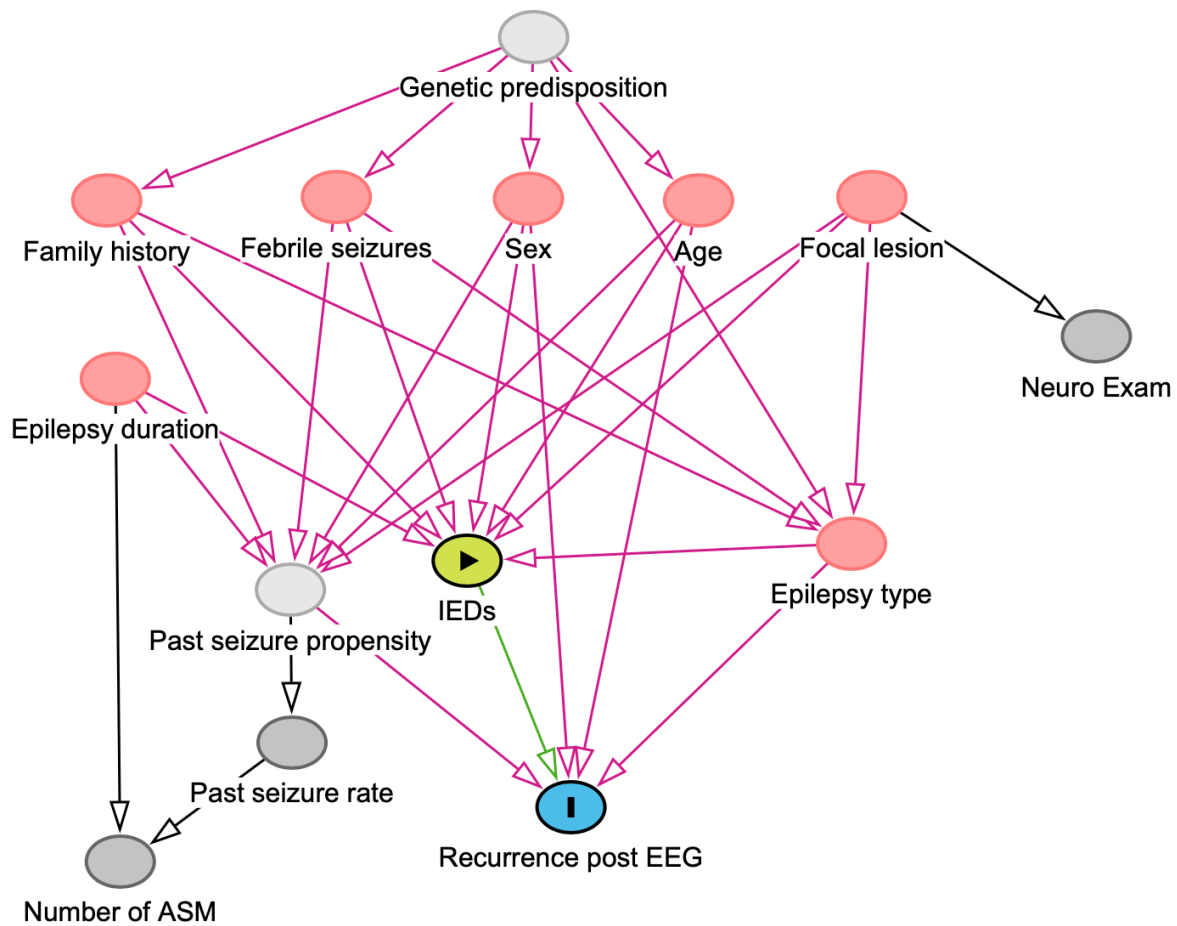


Figure 11: Directed acyclic graph (DAG) depicting causal relationships between model covariates. Green node represents the exposure of interest (IEDs on EEG), blue node indicates the studied outcome (seizure recurrence). Red circles denote shared ancestors of exposure and outcome, grey circles represent variables outside the causal path, and light grey circles represent unobserved variables. Pink arrows highlight potential biasing paths that should be controlled in the multivariate model.

Supplementary Table 1: Coefficients of each covariate in the initial Cox proportional hazards model (no interactions)

Covariates	Coefficient (exponentiated)	p-value
Presence vs. absence of IEDs	1.55 [1.15–2.08]	0.0038
Time from epilepsy onset (log)	0.86 [0.75–0.99]	0.030
Epilepsy type: generalized	0.91 [0.64–1.30]	0.61
Presence of a focal lesion	0.97 [0.69–1.34]	0.83
Sex: male	1.02 [0.78–1.35]	0.86
Age	0.76 [0.65–0.88]	0.00031
Family history of epilepsy	1.31 [0.85–2.03]	0.23
Febrile convulsions	1.32 [0.62–2.82]	0.47

Supplementary Table 2: Coefficients of each covariate in the final Cox proportional hazards model (with interactions + adjusted for past seizure rate)

Covariates	Coefficient	p-value
Presence vs. absence of IEDs	1.47 [1.01–2.15]	0.043
Time from epilepsy onset (log)	0.91 [0.79–0.85]	0.20
Epilepsy type: generalized	0.97 [0.62–1.51]	0.90
Presence of a focal lesion	1.10 [0.80–1.52]	0.56
Sex: male	0.87 [0.66–1.15]	0.33
Age	0.70 [0.58–0.85]	0.00020
Family history of epilepsy	1.51 [0.98–2.32]	0.06
Febrile convulsions	0.84 [0.36–1.98]	0.69
Past seizure rate (log)	1.71 [1.44–2.02]	<0.0001
Presence of IEDs x Epilepsy type: generalized	1.23 [0.62–2.44]	0.55
Presence of IEDs x Age	1.44 [1.06–1.96]	0.019
Presence of IEDs x Past seizure rate (log)	1.01 [0.75–1.34]	0.97

Supplementary Table 3: Sensitivity analyses: adjusted HR (aHR) for the presence of IEDs in different scenarios

Model or subgroup	aHR for IED	p-value
Excluding idiopathic generalized epilepsy (n=412)		
Focal epilepsy	1.50 [1.05–2.13]	0.026
Generalized epilepsy	3.09 [1.01–9.42]	0.048
Excluding repeat EEGs (n = 438)		
Focal epilepsy	1.56 [1.05–2.30]	0.027
Generalized epilepsy	1.86 [1.08–3.23]	0.026
Adding focal slowing as a covariable (n=488)		
Focal epilepsy	1.54 [1.04–2.28]	0.030
Generalized epilepsy	1.80 [1.07–3.03]	0.026