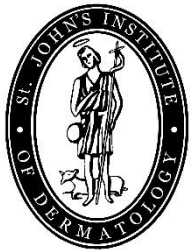


Understanding comorbidities in adult eczema

Sinéad M Langan

Wellcome Senior Clinical Fellow and Professor of Clinical Epidemiology, LSHTM
Honorary Consultant Dermatologist, St John's Institute of Dermatology, London



Sinéad Langan, MB BCh BAO FRCP PhD
sinead.langan@lshtm.ac.uk

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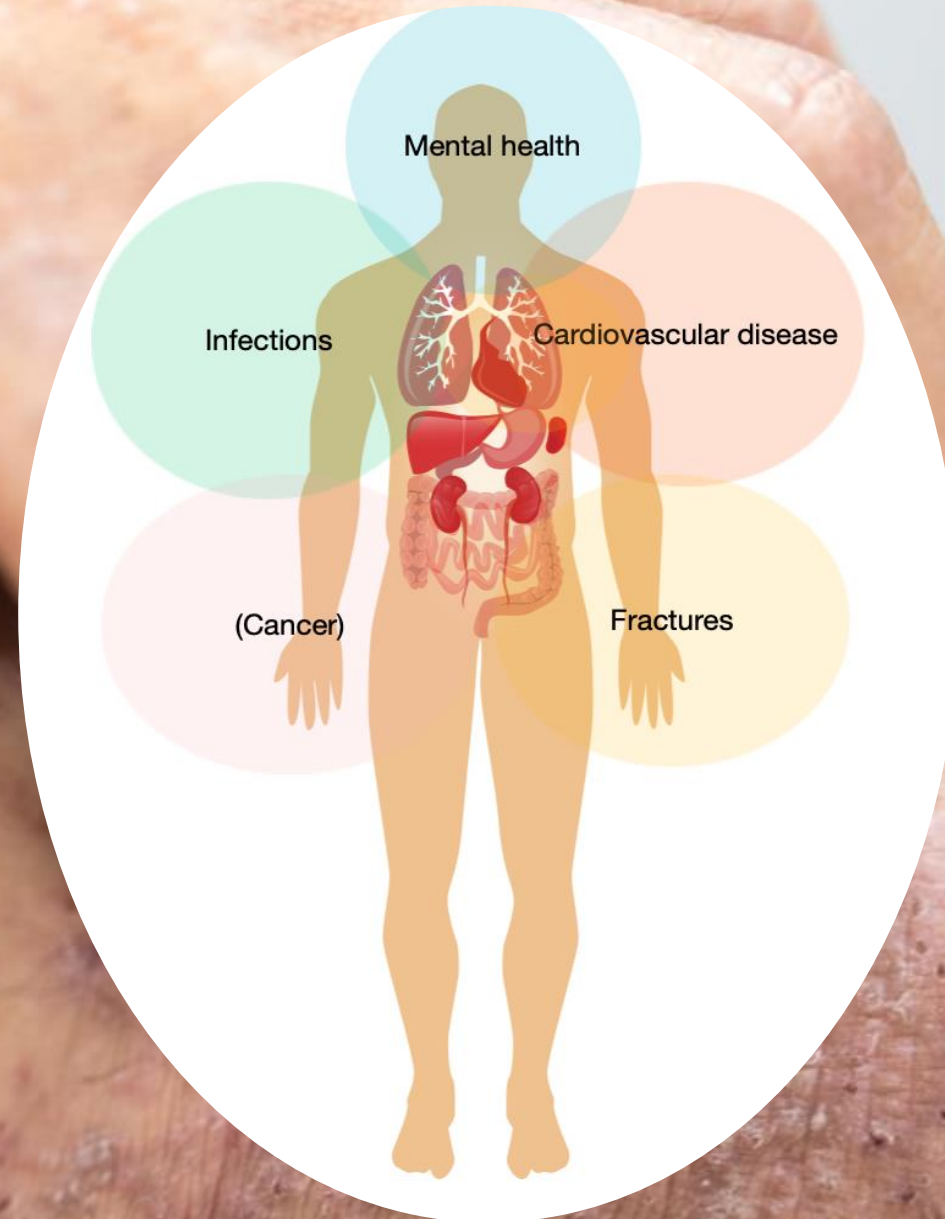
Eczema is common and heterogeneous



Why does comorbidity matter in eczema?

- Burden on patients
- Clinical management
- Exclusion from trials
- What do we need to do about it?

What do we know about associated morbidities?

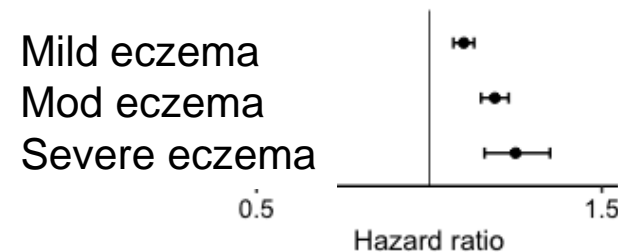


Mental health

- Associated with ADHD in cross-sectional and case-control studies (most studies in children)
- Associated with anxiety and depression, and suicidality in adults



Depression
(13/1000 person-years age 18+)



Schonmann, et al. 2020. *JACI In Pract*

- Recent AAD guidance pooled OR 1.99 (1.53-2.59) for depression, OR 1.40 (1.12-1.75) for anxiety

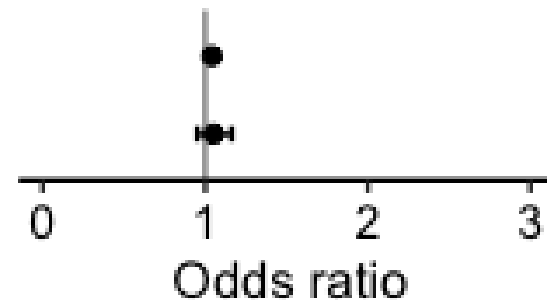
Davis D, et al. 2022. *JAAD*

- No clear indication of increased risk; encourage standard screening
- Studies- mixed quality with varying results: a meta-analysis of 8 cohort studies found an increased risk of skin carcinomas, kidney, CNS, and pancreas cancers while case-control studies showed a decreased risk of CNS, pancreatic, and lung cancers

Wang L, et al. 2020. *JAMA Derm*

Example: Cohort Study of AD and any cancer using UK electronic health records (N=2,711,745) and Denmark National Patient registry (N=490,618)

England (9/1000)
Denmark (1/1000)



Mansfield K, et al. 2020. *JAMA Derm*

Everything you've ever wanted to know about eczema (but were too busy scratching to ask)

Eczema can be a year-round torment for the 1.6 million adults affected in the UK, but winter causes particular misery. So how can you avoid it - or treat it if you have it?



OPEN ACCESS

Severe and predominantly active atopic eczema in adulthood and long term risk of cardiovascular disease: population based cohort study

Richard J Silverwood,¹ Harriet J Forbes,¹ Katrina Abuabara,² Anna Ascott,³ Morten Schmidt,^{4,5} Sigrún A J Schmidt,⁴ Liam Smeeth,¹ Sinéad M Langan¹

¹Faculty of Epidemiology and Population Health, London School of Hygiene and Tropical Medicine, London WC1E 7HT, UK

²Program for Clinical Research, Department of Dermatology, University of California, San Francisco School of Medicine, San Francisco, CA, USA

³Royal Sussex County Hospital, Brighton, UK

⁴Department of Clinical Epidemiology, Aarhus University Hospital, Aarhus, Denmark

⁵Department of Cardiology, Regional Hospital West Jutland, Herning, Denmark

Correspondence to: S M Langan Sinead.Langan@lshtm.ac.uk

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ABSTRACT

OBJECTIVE

To investigate whether adults with atopic eczema are at an increased risk of cardiovascular disease and whether the risk varies by atopic eczema severity and condition activity over time.

DESIGN

Population based matched cohort study.

SETTING

UK electronic health records from the Clinical Practice Research Datalink, Hospital Episode Statistics, and data from the Office for National Statistics, 1998–2015.

PARTICIPANTS

Adults with a diagnosis of atopic eczema, matched (on age, sex, general practice, and calendar time) to up to five patients without atopic eczema.

MAIN OUTCOME MEASURES

Cardiovascular outcomes (myocardial infarction, unstable angina, heart failure, atrial fibrillation, stroke, and cardiovascular death).

RESULTS

387 439 patients with atopic eczema were matched to 1 528 477 patients without atopic eczema. The median age was 43 at cohort entry and 66% were female

outcomes. Additional adjustment for cardiovascular risk factors as potential mediators partially attenuated the point estimates, though associations persisted for severe atopic eczema.

CONCLUSIONS

Severe and predominantly active atopic eczema are associated with an increased risk of cardiovascular outcomes. Targeting cardiovascular disease prevention strategies among these patients should be considered.

Introduction

Atopic eczema affects up to 10% of adults and is becoming more common worldwide.¹ It is caused by both skin barrier and immune system defects, and there is increasing evidence that the systemic inflammatory component of atopic eczema may contribute to other conditions, including cardiovascular outcomes.² Given the prevalence of atopic eczema, even a small increase in cardiovascular risk would be important from a public health perspective.

Mixed findings have been reported in cohort studies assessing associations between atopic eczema and acute cardiovascular outcomes from Taiwan,



Cardiovascular disease

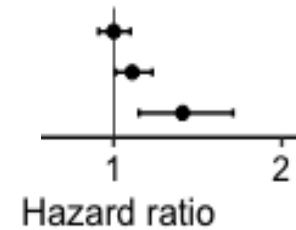
- Small increases in risk of cardiovascular outcomes (including death) among those with moderate-severe eczema

Ascott A, *et al.* 2019. *JACI*

Example: Cohort Study of AD and CVD using UK electronic health records
(N=2,636,006)

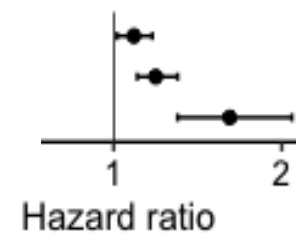
Myocardial Infarction

Mild eczema (1.8/1000)
Mod eczema (2.7/1000)
Severe eczema (2.9/1000)



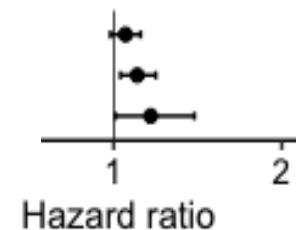
Heart Failure

Mild eczema (1.0/1000)
Mod eczema (3.3/1000)
Severe eczema(3.4/1000)



Stroke

Mild eczema (2.3/1000)
Mod eczema (3.5/1000)
Severe eczema (3.1/1000)



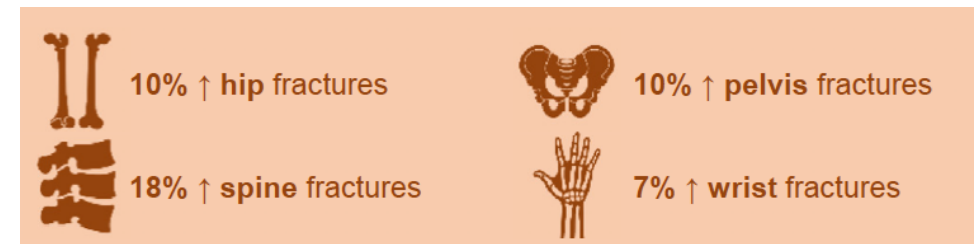
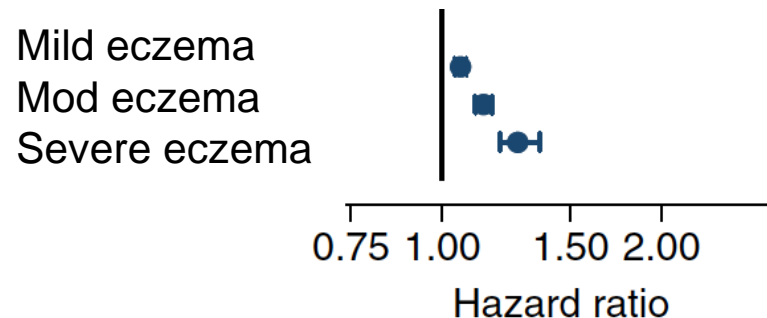
Silverwood R, *et al.* 2018. *BMJ*

Bone health

- Eczema associated with lower bone mineral density, osteoporosis, and fractures. Some studies found no association.

Mukovozov, *et al.* 2021. *JEADV*

Example: Cohort Study of eczema and fractures UK electronic health records (N=3,131,838)



Lowe K, *et al.* 2020. *JACI*

Matthewman J *et al* 2022 *JACI IP*

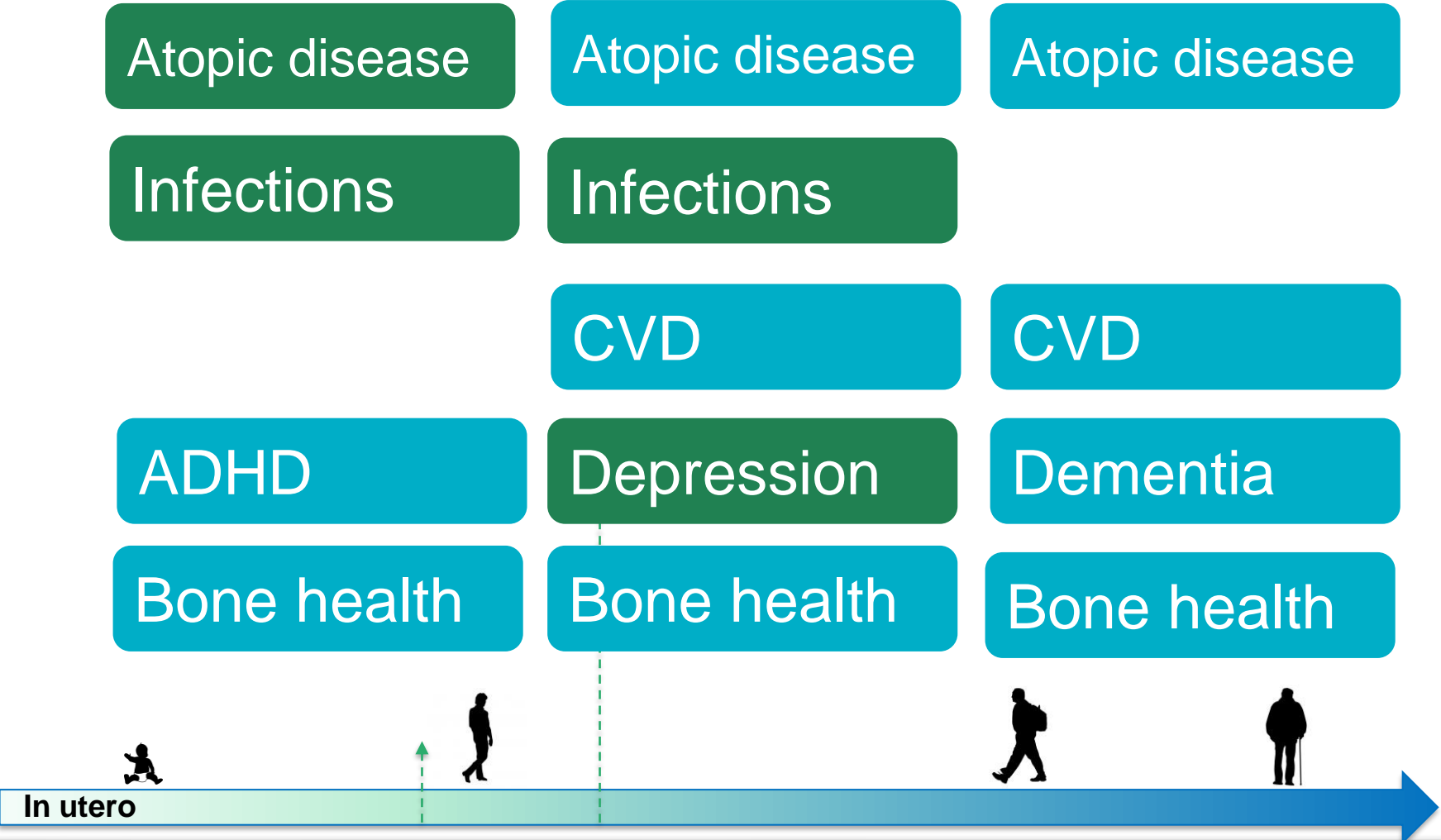
Why the conflicting information?

- Eczema is variable in characteristics



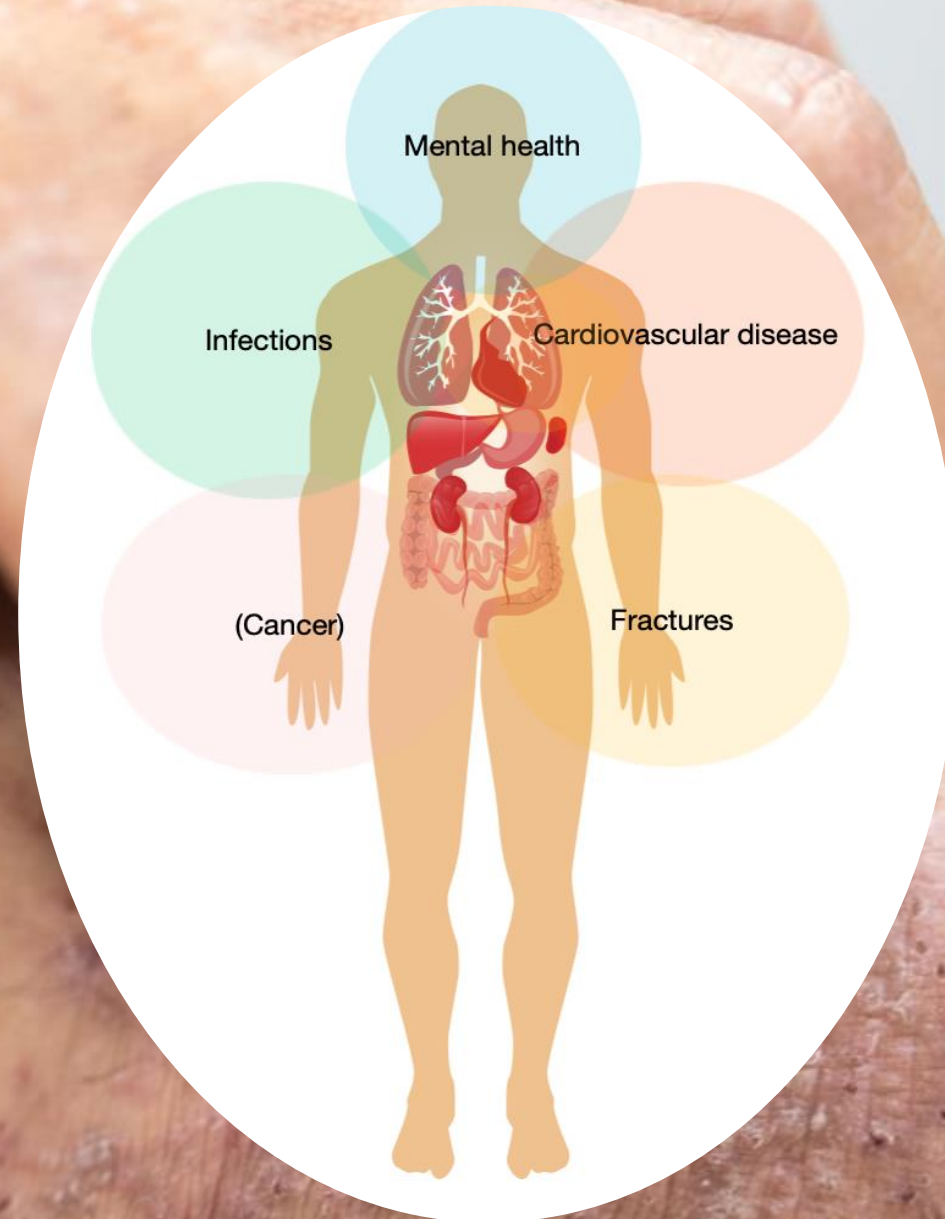
- Different study designs (cross-sectional vs cohort)
- Difficult to measure severity eczema in routine data

Comorbidities across the life course



AAD
Guidelines:
Davis *et al.*
2022. *JAAD*

What should we do about comorbidities?



Practice Recommendations

- Need to understand risks in subgroups and mechanisms
- No current data on the impact of preventative strategies
- Encourage adherence to standard prevention strategies, e.g. opportunities to encourage smoking cessation



Outstanding research questions

- Do intensive emollient and early use of topical corticosteroids and/or other eczema treatments.... improve general health outcomes including food allergy?

Langan et al. Lancet 2020

- *Should we be doing more about preventing and managing comorbidities?*

Major collaborators

USA

Katrina Abuabara

David Margolis

Joel Gelfand

Joy Wan

Canada

Ashley Yu

Cathryn Sibbald

Eric Benchimol

David Moher

Aaron Drucker

Mina Tadrous

An Wen Chen

UK

Liam Smeeth

Neil Pearce

Harriet Forbes

Catherine Smith

Hywel Williams

Kim Thomas

Miriam Santer

Carsten Flohr

Sara Brown

Lavinia Paternoster

Amanda Roberts

Zoe Venables

Ireland

Alan Irvine

Netherlands

Loes Hollestein

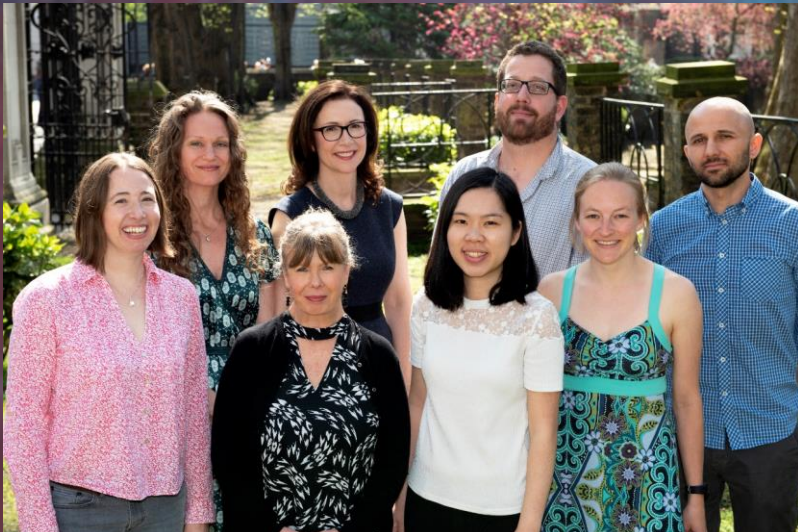
Denmark

Sigrún Schmidt

Morten Schmidt

Henrik Sorensen

International collaborations



The IMID taskforce



Thank you

Sinéad Langan, MB BCh BAO FRCP PhD

✉ sinead.langan@lshtm.ac.uk

🐦 [@sineadlangan_1](https://twitter.com/sineadlangan_1)

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