

# Diagnostic Criteria for Erosive Vulval Lichen Planus : An electronic-Delphi Consensus Exercise

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## Introduction

- Erosive lichen planus is a distressing, chronic inflammatory condition affecting mucocutaneous sites.
- It can be challenging to make the diagnosis of erosive lichen planus affecting vulvovaginal sites due to variability in clinical signs and often poor histological correlation. There are several clinically similar differential diagnoses.
- An agreed set of diagnostic criteria is needed to guide clinical practice and to standardise inclusion of participants into clinical trials.

## Aims

To define a classification criteria for erosive vulvovaginal lichen planus through international expert consensus.

## Methods

- A three-stage, international, multi-perspective electronic-Delphi (e-Delphi) consensus exercise (Fig. 1) using an online survey tool.
- Consensus was defined as being where 75% of participants agreed on the importance of an item .

### Expert group identified:

- International experts from key stakeholder groups were identified through multidisciplinary societies .

### Evidence for potential erosive vulvovaginal lichen planus diagnostic criteria collected:

- Results from the following exercises were combined:
- A systematic review of the literature to summarise the current evidence base;
  - Structured interviews with a sample of UK dermatologists to ascertain current clinical opinion .

### e-Delphi Round 1:

- Participants were asked to rank list of potential diagnostic criteria on 5-point Likert scale;
- Suggestions for additional criteria could also be made;
- The survey tool for Round 2 was amended according to feedback received from Round 1.

### E-Delphi Round 2:

- Items from Round 1 plus additional diagnostic criteria were ranked again on 5-point Likert scale;
- Items that reached consensus as 'not important' were removed from the list.

### E-Delphi Round 3:

- Diagnostic criteria that had reached consensus in Rounds 1 and 2 were rated as 'essential', 'supportive' or 'neither';
- Participants were asked *how many* features should be present to confidently diagnose erosive vulvovaginal lichen planus.

Figure 1: Steps used in the e-Delphi process

## Results

- 73 individuals representing four stakeholder groups (Fig.2) from 14 different countries participated. The majority had over 10 years experience in the field of vulval skin disorders (Fig.3). 69 (95%) participants completed all three rounds.

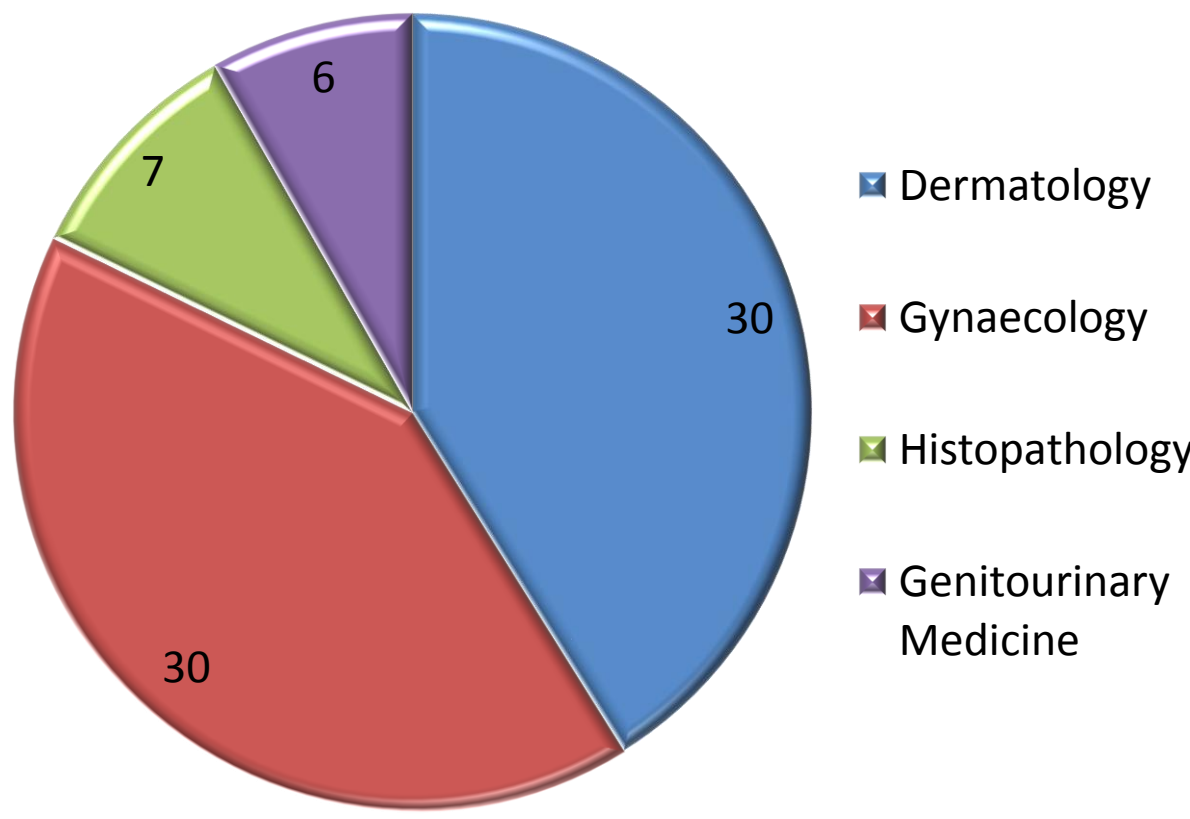


Fig. 2: Stakeholder groups represented by participants in e-Delphi exercise

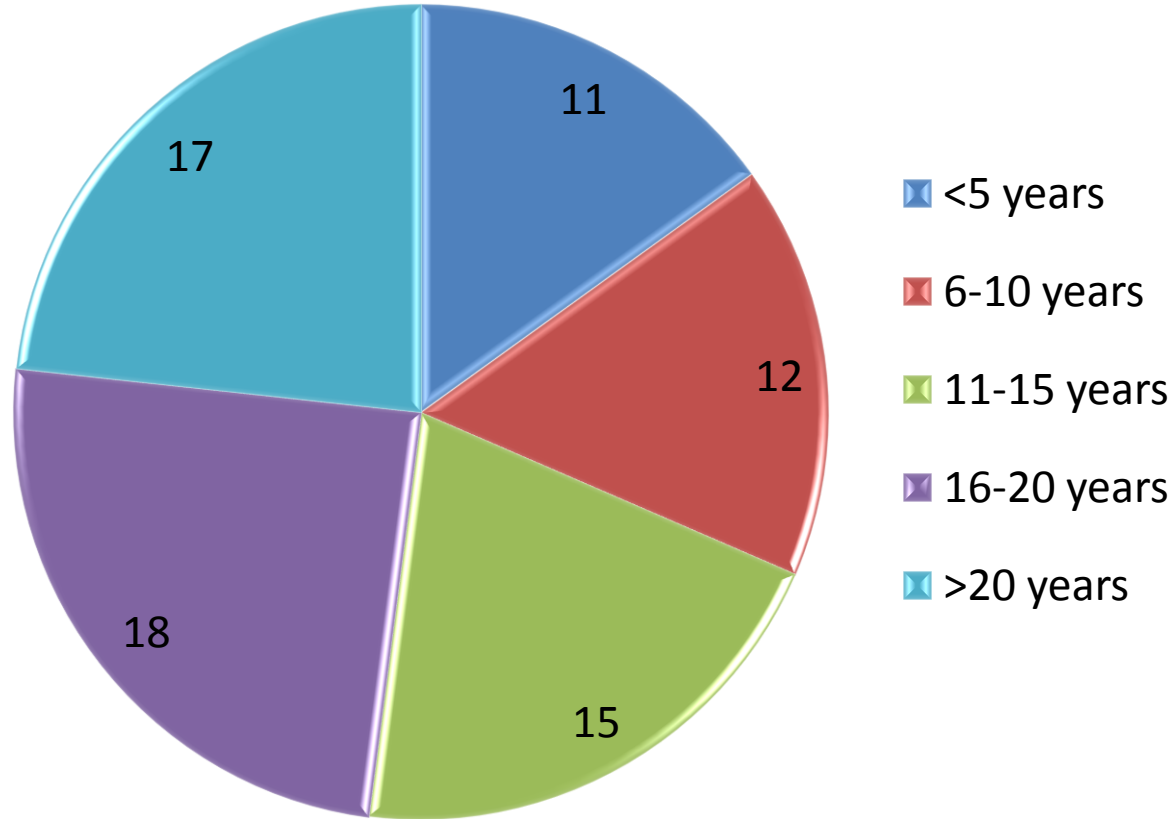


Fig. 3: e-Delphi Participants' duration of experience in managing vulval skin disorders

### Round 1:

12 potential diagnostic criteria were in the initial circulated list for consideration. 5 additional diagnostic criteria were suggested by participants.

### Round 2:

A total of 17 diagnostic criteria were considered by participants.  
6 were removed as they did **not** reach consensus as being important

### Round 3:

9 diagnostic criteria reached consensus as being 'supportive' (Fig.4); None were considered 'essential'.  
**≥3 supportive criteria should be present to fulfil a diagnosis of erosive vulvovaginal lichen planus.**

### Criteria for the diagnosis of Erosive Vulvovaginal Lichen Planus:

- |  |  |
|--|--|
| i) Scarring/loss of normal architecture;   | vi) Presence of vaginal inflammation;  |
| ii) Presence of a hyperkeratotic border to lesions/Wickham's striae in surrounding skin; | vii) Presence of a well-defined inflammatory band involving the dermo-epidermo junction; |
| iii) Involvement of other mucosal surfaces   | viii) Inflammatory band consists predominantly of lymphocytes;                           |
| iv) Well-demarcated erosions/erythematous areas at the vaginal introitus;                | ix) Signs of basal layer degeneration.   |
| v) Symptoms of pain/burning;   |  |

**Any combination of 3 or more of the above 9 criteria are required**

Fig. 3: Supportive criteria for diagnosing erosive vulvovaginal lichen planus as determined by e-Delphi consensus exercise

## Conclusion

- The Delphi technique is characterised by four core features: i) involvement of an expert panel; ii) multiple iterations; iii) feedback between rounds and iv) anonymity.
- This technique enabled us to define an internationally accepted classification criteria for erosive vulvovaginal lichen planus. The methodology also has wide utility in other aspects of healthcare.
- This work is important to help standardise clinical practice and to ensure the inclusion of participants in future research studies.

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