Acne – Primary Care Treatment Pathway

**What is Acne?**

Acne, an inflammatory disorder of the sebaceous glands, is one of the most common dermatological disorders and is considered a chronic disease. Treatment may be required to improve both the physical appearance and prevent physical and psychological scarring. Whilst it is primarily a skin disorder of the young, often clearing up spontaneously, it can affect up to 12% of women and 3% of men over the age of 25. Treatment options for all age groups and both sexes are largely the same, apart from Hormonal therapy.

**Important Information About Treatments**

- Treatments are effective but take time to work (typically up to eight weeks) and may irritate the skin, especially at the start of treatment.
- Topical and systemic antibiotics should not be prescribed together, or used as sole treatment as bacterial resistance is a growing concern.
- All treatments should be routinely reviewed at 12 weeks.
- In the event of pregnancy, topical retinoids and oral tetracyclines should be discontinued.

**At Review**

- If treatment goals are reached at the 12 week review:
  - Maintenance therapy should be considered
  - Discontinue topical/systemic antibiotics
- If treatment goals are NOT reached at the 12 week review:
  - Review adherence to treatment(s)
  - Consider alternative treatments

**Grading acne based on lesion type can help guide treatment**

<table>
<thead>
<tr>
<th>Treatment graded by the predominant lesion present</th>
<th>Comedones</th>
<th>Papules</th>
<th>Pustules</th>
<th>Nodules/Cysts*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topical Retinoid Tretinoin, Isotretinoin &amp; Adapalene</td>
<td>+++</td>
<td>++</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Benzoyl Peroxide (BPO)</td>
<td>+</td>
<td>+++</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Azelaic Acid 20% – Skinoren</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Topical Antibiotics</td>
<td>+</td>
<td>++</td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td>Topical Retinoid/BPO – Epiduo 0.1% &amp; 0.3%</td>
<td>++</td>
<td>++</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Topical Retinoid/Antibiotic Combination Treclin</td>
<td>+</td>
<td>++</td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td>Topical Antibiotic/BPO Combination Duac</td>
<td>++</td>
<td>++</td>
<td>+++</td>
<td></td>
</tr>
<tr>
<td>Oral Antibiotics</td>
<td>++</td>
<td>+++</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Combined Oral Contraceptives (for females only)</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td></td>
</tr>
</tbody>
</table>

**Legend**

- +++ Strong recommendation
- ++ Moderate recommendation
- + Low recommendation

**Red Flag**

Refer immediately if:
- Severe psychological distress
- Uncontrolled acne developing scarring
- Nodulo-cystic acne*
- Diagnostic uncertainty
- Patients failing to respond to multiple therapeutic interventions or to two adequate courses of antibiotics (12 weeks each)

*Nodules/Cysts

Treatment can be initiated, but patients should be referred.
Practical Advice

1. **Topical retinoids** should be used for all grades of acne. Adapalene is better tolerated than other topical retinoids.

2. The **irritant reaction** with topical retinoids and BPO can be ameliorated by gradual introduction e.g. by short contact initially (tea time to bed time) or less frequent application (two or three times a week). Concurrent use with light non-comedogenic emollients may be useful.

3. **Azelaic acid** may be beneficial in patients with darker skin where acne can lead to hyperpigmentation.

4. BPO can cause bleaching of fabric.

5. **Oral antibiotics should not be used as sole treatment.** They should be prescribed with a topical retinoid and/or a BPO. Tetracyclines are first line and all show similar efficacy. Lymecycline and Doxycycline are likely to have better adherence due to their once daily dosage. Minocycline should not normally be used in view of higher risks. No tetracycline should be used in the under 12. Erythromycin is second line (first line in pregnancy and in children) due to high bacterial resistance. Trimethoprim is an option, but uncommonly used in primary care.

6. **Oral contraceptives:** unopposed progesterones (including LARCS) can make acne worse. Second and third generation Combined Oral Contraceptives are generally preferred. Co-cyprindiol (Dianette) is used in moderate to severe acne where other treatments have failed and discontinued three months after the acne has been controlled.

7. **Combination Products:** Combining topical treatments is recommended for most people with moderate acne (ref: NICE CKS). Combination products improve adherence.

Maintenance

As acne is a chronic condition it is advisable to use a topical retinoid for long term maintenance. This may mean years. Occasional flares may require revisiting previously successful treatments.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Epiduo</strong></td>
<td>No issue with antibiotic resistance Anticomedonal</td>
</tr>
<tr>
<td><strong>Treclin</strong></td>
<td>Broad spectrum of action Anticomedonal</td>
</tr>
<tr>
<td><strong>Duac</strong></td>
<td>Rapid onset of action on inflammatory lesions Two strengths available</td>
</tr>
</tbody>
</table>

Top Tips and Myth Busting

Acne is not caused by a poor diet. However, the role of diet in acne remains controversial and a healthy diet is positively encouraged. There is some evidence that a high GI diet can exacerbate acne.

Poor hygiene is not a contributing factor to acne and aggressive washing is to be discouraged. Patients with acne should be encouraged to wash no more than twice a day using gentle, fragrance free cleanser and dissuaded from picking and squeezing spots (pustules).

Non comedogenic make up and emollients are recommended.

Acne is not infectious.

Further information for healthcare professionals and patients can be found at:-
[www.acneacademy.org.uk](http://www.acneacademy.org.uk)
[www.pcds.org.uk](http://www.pcds.org.uk)

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