

Systemic Antibiotic Treatment for Acne Vulgaris

The recommended approach to the management of acne vulgaris depends initially on the degree of severity of the condition.

Generally, the follow tiered approach is recommended:

1. For mild to moderate acne – topical retinoids and/or topical benzoyl peroxide;
2. For moderate to severe acne – consider a systemic treatment, that is particularly useful for inflammatory acne where topicals have failed and/or are inappropriate;
3. Severe acne – consider referral for consideration of further treatment options e.g. oral isotretinoin.

Oral Antibiotics for acne vulgaris

A course of an oral antibiotic is a treatment option for moderate to severe acne where a topical treatment alone has failed to satisfactorily treat the condition.

Oral antibiotics licensed for acne vulgaris include:

- Tetracycline 500mg twice daily
- Oxytetracycline 500mg twice daily
- Doxycycline 100mg once daily
- Lymecycline 408mg once daily
- Erythromycin 500mg twice daily (option in pregnancy)

Oral antibiotic courses are recommended to be taken for a **maximum of 3 months duration**.

If there is no improvement after this 3 month period, a second course using a different antibiotic can be tried i.e. **6 months in total**. There is little evidence that continuing oral antibiotic treatment beyond this extended time period is helpful.

It is also important to remember that when using an oral antibiotic, this should be co-prescribed with a suitable topical agent.

Best practice suggestions for the appropriate oral antibiotic management of acne vulgaris

To assure good practice with oral antibiotics for acne the following could be considered.

1. Oral antibiotics should not be used for mild acne where topical treatments are indicated;
2. Choices of oral antibiotics for acne include the tetracycline class e.g. tetracycline, doxycycline, lymecycline. Erythromycin can be considered in pregnancy;
3. An individual oral antibiotic course should not exceed a 3 month period;
4. Where no improvement is noted after an initial course of oral antibiotics, a further course can be considered using a different agent and after this referral considered if necessary;
5. Minocycline is no longer recommended in the treatment of acne;

6. NICE/PHE guidelines, where an oral antibiotic is clinically indicated, recommend either tetracycline or doxycycline as a 6-12 week course.

Suggested actions

- Review all patients who have been on a course of an oral antibiotic* for acne for at least 3 months.
- Consider conducting a telephone consultation to assess whether there has been no or limited improvement in symptoms - Stop or switch
- Review all patients who have been taking oral antibiotics for 6 months. As there is limited evidence of efficacy beyond 6 months duration, review and consider stopping treatment (also considering the need for referral)

*Due to doxycycline being the first line treatment in COVID-19 bacteria pneumonia it would be prudent to review these patients first.

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