

Acne and pregnancy interact in a variable way. In the majority, pregnancy has a beneficial effect on the activity of acne, and this is through the sebosuppressive effect of estrogens. In a small number of cases, there is a flare-up of acne requiring active intervention, especially if scarring is a threat. Acne may also appear for the first time during pregnancy. There are reports of women experiencing acne only during pregnancies. If an acne patient during active treatment conceives then careful assessment of teratogenicity issues needs to be carried out and the safety to carry the pregnancy to term needs to be determined. There are times when a medical termination of pregnancy may be a safer option.

It is difficult and challenging to treat acne in a pregnant woman as most drugs are contraindicated or considered unsafe [Table 13]. For comedonal acne, BPO (2.5–5.0%) is safe and may be sufficient. Azelaic acid, although not contraindicated, is not recommended.<sup>[1]</sup> Topical retinoids are controversial in pregnancy because of concerns of systemic absorption. However, in clinical studies of topical adapalene and tazarotene, plasma concentrations were found to be below 3 nM, which is similar to or lower than endogenous tretinoin, suggesting that the teratogenic potential of topical retinoids is negligible.<sup>[2-4]</sup> Inflammatory acne may be treated with BPO or topical antibiotics, or a combination of the two. Macrolides are generally regarded as safe in pregnancy. Oral erythromycin is permitted for scar-threatening acne, and may be given for 3–9 months as needed. Presumably, it is just as safe to administer newer macrolides, roxithromycin, clarithromycin, and azithromycin, in usual acne dosages. Any such intervention must be well justified, and the perceived benefits must outweigh the uncertainties. Tetracyclines (including doxycycline, minocycline, lymecycline) being unsafe in the second and third trimester of pregnancy (vide supra) are best avoided at all stages of pregnancy, whereas oral retinoids being highly

Table 13: Drugs used in acne and their relative risk in pregnancy

Drug name	Risk category	Comment
Tetracycline	D	
Doxycycline	D	
Minocycline	D	
Azithromycin	B	
Clarithromycin	C	
Erythromycin	B	
Isotretinoin	X	
Vitamin A	A	X in therapeutic doses
Vitamin E	A	C in therapeutic doses
Prednisolone	C	
Dapsone	C	
Metformin	B	
Finasteride	X	
Flutamide	D	
Cyproterone acetate	Not available	
Tretinoin cream	C	
Adapalene cream	C	

FDA pregnancy categories: A and B: Safe in pregnancy; C: Animal studies showed fetal adverse effect; no adequate and well-controlled human studies; potential benefits may warrant use despite potential risks; D: Positive evidence of human fetal risk; potential benefits may warrant use despite potential risks; X: Animal/human studies demonstrated fetal abnormalities; positive evidence of human fetal risk; contraindicated

teratogenic are absolutely contraindicated.

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