Acne Vulgaris Therapy With Low Dose Isotretinoin: A Retrospective Review
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Introduction
Acne is a common skin problem among adolescents and young adults. If left untreated, it can potentially result in scarring, permanent disfigurement and profound psychological and emotional impact. Oral isotretinoin is the most effective treatment especially for severe acne\(^1\). However, its use may be associated with many side effects such as cheilitis, dry eyes and skin, epistaxis, rashes, hair loss, fatigue, muscle pain and teratogenicity. The side effects caused intolerance in most patients and thus limiting the daily dosage. Recent reports indicate that acne patients have been benefiting from the low dose such as 0.15–0.40 mg/kg/day or intermittent treatment protocols\(^1,2,3\). Most patients with acne vulgaris in Dermatology clinic, Hospital Pulau Pinang were treated with low dose isotretinoin. This study is to access the efficacy and side effect of the isotretinoin therapy used.

Method
All clinical notes of the patients treated with isotretinoin from January 2009 to July 2015 were traced and reviewed. Patients who are still undergoing treatment are excluded. A total of 57 patients were identified. However, 23 of them were not suitable for analysis due to incomplete data and another 2 patients were excluded as their mean daily dosage of isotretinoin exceeded 0.5mg/kg/day.

Results
A total of 32 patients (17 males, 15 females) who were treated with less than isotretinoin 0.5mg/kg/day were reviewed and analyzed. The racial distribution (18 Chinese, 13 Malays, 3 Indians) was consistent with the clinic attendance. Majority of them (30, 94%) were moderate to severe acne patients who had failed systemic antibiotic or hormonal therapy before started on isotretinoin. Two of them with severe nodular cystic acne were started on isotretinoin without trial of antibiotics. Seven patients required a short course of systemic antibiotics (1-16 weeks) as adjunctive therapy. A short duration of prednisolone was given to 4 patients at the beginning of isotretinoin therapy to reduce the severe inflammation and discomfort.

Majority of the patients received 0.2–0.3 mg/kg/day of isotretinoin. (Refer Chart 1). These results corresponded to the findings of Plewig et al\(^4\) and Lee et al\(^5\), who demonstrated the effectiveness of low-dose isotretinoin in the treatment of acne conglobata and moderate acne, respectively. Twenty-seven (84%) patients were treated for more than 6 months (refer Chart 2).

The therapy was quite well tolerated despite the long duration of treatment. The side effects experienced were mild. One patient was free of any side effect. Most patients (96%) had cheilitis but controlled with topical vaseline ointment. One patient with raised baseline lipid profiles, had a transient further increase in the total cholesterol and low-density lipoprotein (LDL) cholesterol which returned back to baseline once isotretinoin therapy was stopped two months later. One patient had dry eyes with 20mg daily of isotretinoin dose, but resolved when the dose was reduced to 10mg daily. The respond to the treatment was good. Twenty patients (62.5%) had no side effect of the treatment, while the other half needed isotretinoin again.

Conclusion
Low dose isotretinoin of less than 0.5mg/kg/day is effective for treating severe form of acne vulgaris with minimal side effects.

Limitation
Small sample size, retrospective review

Keywords: Acne vulgaris, Isotretinoin
All authors do not have conflict of interest to declare

References