Alopecia areata (AA) is a common form of Non-Scarring Alopecia that appears equally in males and females of any age, although children and adolescence are more commonly affected.

The disorder usually characterized by limited alopecic patches on the scalp, but more severe forms may affect the entire scalp (Alopecia totalis) or the whole body (alopecia universalis).

Treatment is challenging and aims at regrowth of hair in the affected individuals.

There are various therapies for the disease but the effect of each therapy differs from one patient to another, making a universal treatment difficult to implement.

The treatment of AA with PUVA has been trialled with variable success, similar to PUVA therapy, NB-UVB has previously demonstrated to be effective for number of other PUVA-responsive diseases including Psoriasis, Parapsoriasis, vitiligo ....etc, some studies reported that it is better than PUVA in these diseases.

In this study we aim to determine the efficiency of Narrow Band UVB (NB-UVB) light therapy for extensive alopecia areata in comparison with PUVA therapy.

Thirty Patients with extensive AA more than 40% were included and categorized into two groups:-
**Group I:** included 15 patients, 7 patients with AA > 40% scalp involvement, 4 patients with AT and 4 patients AU. This group received PUVA therapy 3 times a week for three months.

**Group II:** included 15 patients, 7 patients with AA > 40% scalp involvement, 4 patients with AT and 4 patients with AU. This group received NB-UVB therapy 3 times a week for three months.

When we compared between the two lines after three months of therapy we reported that number of poor results with NB-UVA was more (ten patients) than those with PUVA (three patients) and the relation was highly significant.

Excellent results with PUVA were reported in eight patients while reported only in two patients with NB-UVB so the relation was also significant.

The comparison between the two lines according to mean of the total cumulative dose and the number of sessions was highly significant.

The most common side effects reported in both groups were mild burning erythema and mild itching.

In conclusion, PUVA can be used as an alternative therapy for patients with extensive resistant alopecia. NB-UVB therapy is indicated when there is contraindication for PUVA treatment (children, pregnant women, hypersensitivity to psoralen).
Recommendation

- Further studies on the effect of NB-UVB as a treatment of AA with long duration and more number of patients may show best results.

- Further study on the effect of the NB-UVB as a treatment of AA when combined with local or systemic psoralen.

- Further study on the effect of the PUVA as a treatment of AA with longer duration and higher dose and tapering it gradually.