Introduction: Facial telangiectasia is a cutaneous vascular disease characterized by capillary dilatation and diffuses facial redness. Recently new techniques and approaches have emerged constantly in the clinical treatment of facial telangiectasia, such as topical medicine, systemic medicine, laser and light therapy. Intense pulsed light therapy for telangiectasia has been widely accepted by patients because of good therapeutic results and mild side effects.

Objective: To evaluate the efficacy and safety of intense pulsed light vascular filter in the treatment of facial telangiectasia in China.

Materials and Methods: Thirty subjects (Fitzpatrick skin types IV and V) with facial telangiectasia who were treated by intense pulsed light vascular filter at our department from January to August 2018 were enrolled. Data regarding demographics, lesion types, photographs, treatment procedures, outcomes, and follow-ups were collected and analyzed. The primary endpoint was a 2-point improvement of telangiectasia based on a 5-point Telangiectasia Scale comparing the pre-treatment photograph to the post treatment photograph at 30 days post final treatment by an independent reviewer. Treatment completion was defined as >75% vessel clearance. Efficacy was measured by blinded analysis of pre and post images and self-assessment by the subjects. The intense pulsed light vascular filter was configured to produce a narrow spectral output, peaking at 530-650/900-1200nm, with 20–40 millisecond pulses over an energy density range of 15–20 J/cm2 utilizing a 15x35mm spot size were delivered.

Results: The total effective rate was more than 90%. The scores of facial discomfort, erythema and telangiectasia were significantly lower than those before treatment. (p<0.01). No adverse reactions such as purpura, infection, scar occurred during the follow-up.

Conclusions: The intense pulsed light vascular filter is safe and effective in the treatment of facial telangiectasia.
Key words: intense pulsed light; vascular filter; telangiectasia; treatment