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[]

% Straight line % Rotation advancement %
% (Malalignment Deficiency)
Rotation advancement Straight line Short lip
(P < 0.05)

Lower lip Z-plasty Straight line repair
() (Randal-Tennison, LeMesurier)

Cupids bow

()

(Millard)

Upper and lower lip Z-plasty Upper lip Z-plasty

Malalignment deficiency

Malalignment

Orbicularis muscle deformities

Rotation advancement

() Rotation advancement

(P< /)

Straight line

() ()

() Straight line

Short lip

(Microform

Lower lip Z-plasty

(P< /)

Straight line

Rotation adv. Straight line

()

()

()

()

()

Deformity of vermillion border (malalignment)

Vermilion deficiency (notch,whistle)

Unacceptable scar (hypertrophied,depressed,wide)

Short lip

Long lip

Wide lip

Tight lip

Philtral column/cupids bow deformity

Orbicularis muscle deformity

()

()

()

Straight line

Rotation advancement

%

mismatch

()

(%) Stright line (%) Millard

(%) Z-plasty

()

(Deficiency Malalignment)

Short lip

%

() Long lip ()

()

()

(Rotation)

()

()

Short lip

()

Rotation advancement

Straight line

Rotation advancement

(% %)

Tight lip

()

()

Maxillary orthopedics

()

Skin hook

Short lip Bulging

(

()

)

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