

March 28, 2020

Dennis A Bloomfield
Bao-Gan Peng
Sandro Vento
Editors-in-Chief
World Journal of Clinical Cases

Dear Editors:

We wish to re-submit the attached manuscript as an "Review Article (Minireviews)". The manuscript ID is 54451.

The manuscript has been rechecked and appropriate changes have been made in accordance with the reviewers' and editor's comment. The response to the comment has been prepared and attached herewith.

We thank you and the reviewers for your thoughtful suggestions and insights, which have enriched the manuscript and produced a better and more balanced account of the research. We hope that the revised manuscript is now suitable for publication in your journal.

The authors have no conflicts of interest to declare. The manuscript is not being considered for publication in any other journal and has not been submitted elsewhere in the past. All the authors have read the paper, attest the validity of its contents, and agree to its submission.

Thank in advance for your time and we are looking forward to hearing from you

Thank in advance for your time and we are looking forward to hearing from you

Best regards

Corresponding author

Name: Kyu N Kim, MD, PhD

Address: Department of Plastic and Reconstructive Surgery, Konyang University Hospital, University of Konyang College of Medicine, Myunggok Medical Research Center, 685 Gasuwon-dong seo-gu, Daejeon 35365, Korea

Tel: +82 10 6485 0584

Fax: +82 42 600 6057

E-mail: manabear77@naver.com

Response to Reviewers' and Editor's comments

Reviewer #1: This manuscript provides an organized overview of facial KDPIF reconstruction including the classification of KDPIF, modifications, physiology, mechanism of flap movement, consideration of facial relaxed skin tension lines and aesthetics, surgical techniques, clinical applications, and precautions for successful execution of KDPIF reconstruction. The authors did a great job in reviewing the literature about KDPIF, especially KDPIF for facial reconstruction. The Schematic illustrations are also beautiful. There are also clinical pictures illustrating the application of KDPIF in different facial subunits.

→ Thank you for your encouragement.

The limitation of this study:

1. There is no clear description on the surgical procedure for Ω variant KDPIF. The authors could provide more illustration for the indications of Ω variant KDPIF, and how to avoid complication of a Ω variant KDPIF.

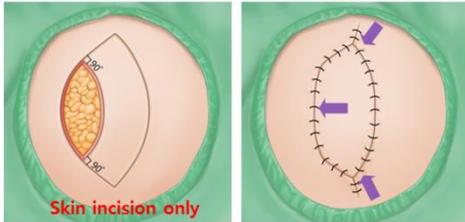
→ Thank you for your valuable comment. We have additionally described the surgical procedure of the Ω variant KDPIF in the MODIFICATIONS IN KDPIF section and provided more illustration of the Ω variant KDPIF in Figure 1F according to your advice. Additionally, we have described the Ω variant KDPIF's complication in the PRECAUTIONS OF KDPIF IN FACIAL RECONSTRUCTION section.

In MODIFICATIONS IN KDPIF section (pages 8-9, line 25-28 and 1, respectively)

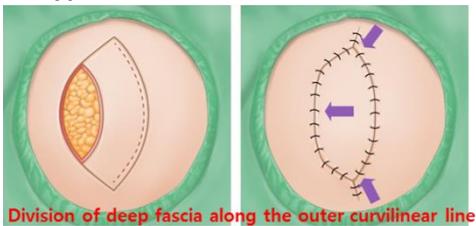
“In contrast to traditional KDPIF, further undermining of the flap with preservation of the central hot spot of the perforators is necessary in this modification. Then, instead of advancing and expanding the skin paddle of the flap as in traditional KDPIF, the two apices and margins adjacent to the wound were conjoined to cover the defect^[17].”

In the Figure Legends (pages 23 and 24)

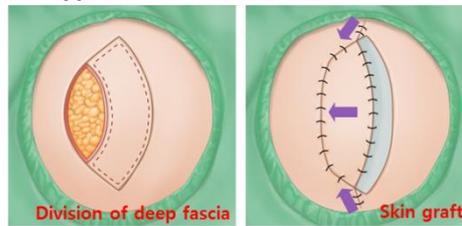
A. Type I KDPIF



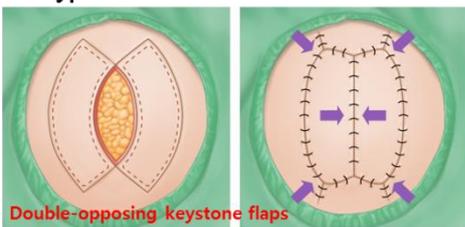
B. Type IIA KDPIF



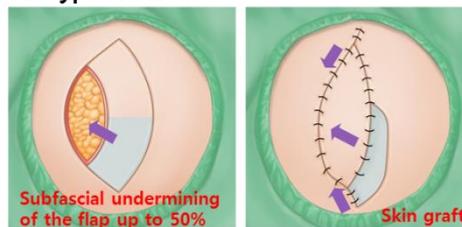
C. Type IIB KDPIF



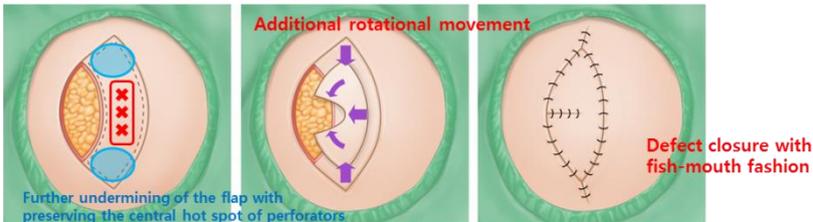
D. Type III KDPIF



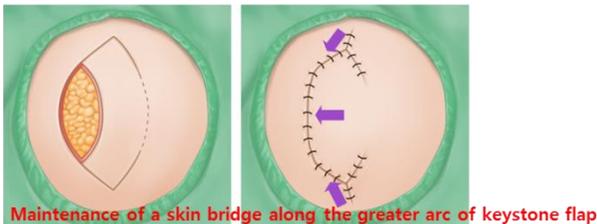
E. Type IV KDPIF



F. Ω -variant KDPIF



F. SMU-modification KDPIF



“(F) The Ω -variant KDPIF (defect closure in the fish-mouth fashion). Further undermining of the flap (blue-colored circle) with preserving the central hot spot of perforators (red-colored x marks).”

In the PRECAUTIONS OF KDPIF IN FACIAL RECONSTRUCTION section (page 17, line2-6)

“Moreover, dog-ear deformity in both ends of the flap, and cone deformity in the Ω -variant KDPIF can lead to complications in aesthetic perspective^[27]. Therefore, a thorough explanation of the possibility of scarring should be preoperatively given to each patient to impress the necessity for prolonged postoperative scar management^[14].”

2. The authors did not describe the limitations/shortcomings of KDPIF. For example, some authors advocate that KDPIF has longer incision than other local flaps.

→ Thank you for your valuable comment. We have additionally described the limitations/shortcomings of KDPIF in the PRECAUTIONS OF KDPIF IN FACIAL RECONSTRUCTION section (page 16-17, line 27-28 and 1-6, respectively.) as follows:

“Using the KDPIF reconstruction, an extension of the operative scars is inevitable as compared to the linear scar that occurs following primary closure with undermining or imbrication^[14]. The KDPIF presents longer incisions compared to other local flaps, such as rhomboid flap and Limberg flap. Moreover, dog-ear deformity in both ends of the flap and cone deformity in the Ω -variant KDPIF can lead to complications in aesthetic perspective^[27]. Therefore, a thorough explanation of the possibility of scarring should be preoperatively given to each patient to impress the necessity for prolonged postoperative scar management^[14].”

3. The authors did not compare KDPIF with other alternative local flaps. For example, in cheek area, the V-Y advancement flap is also feasible.

→ Thank you for your valuable comment. We have described the comparison between the KDPIF and other local flaps in the PRECAUTIONS OF KDPIF IN FACIAL RECONSTRUCTION section (page

17, line 7-11) as :

“Although the KDPIF technique is a good modality of facial reconstruction, previous other local flap techniques can also achieve favorable results according to each circumstances; therefore, surgeons are not required to insist on performing KDPIF for facial reconstruction at all times. It is important to choose a method that can attain the best outcome for each case.”

In conclusion, this is a very good manuscript. And I recommend it be published with minor revision.

→ Thank you for your encouragement.

Reviewer #2: The manuscript entitled “Keystone design perforator island flap in facial defect reconstruction” has useful information for readers who are interested in this field. Its physiology, surgical technique, and clinical application are well documented in this review. I think it is considered for publication without any revision.

→ Thank you for your encouragement.

Editor’s comments:

Please re-provide the original figure documents for Figures 1, 5, 7, 8, 9, 10, 12, and 13. All submitted figures, including the text contained within the figures, must be editable. Please provide the text in your figure(s) in text boxes; Please prepare and arrange the figures using PowerPoint to ensure that all graphs or text portions can be reprocessed by the editor.

Response:

Thank you for your comment. We have embedded the original figure documents of Figures 1, 5, 7, 8, 9, 10, 12, and 13 in the manuscript. We have prepared and arranged the figures using PowerPoint and provided the text within the figures in text boxes.