Figure 4.72: Wound area of Group GE (Gelam) on Day 15 of treatments. MT stained sections. 20X Magnification. Epidermis layer formed were evenly covered the wound area.

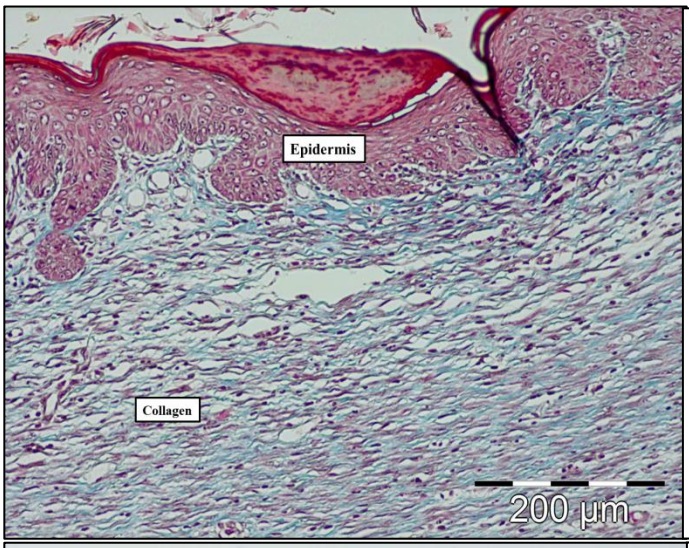

Figure 4.73: Collagen in the granulation tissue of Group GE (Gelam) on Day 15 of treatments. MT stained section. 100X Magnification. Collagen fibers were loosely arranged in the granulation tissue.

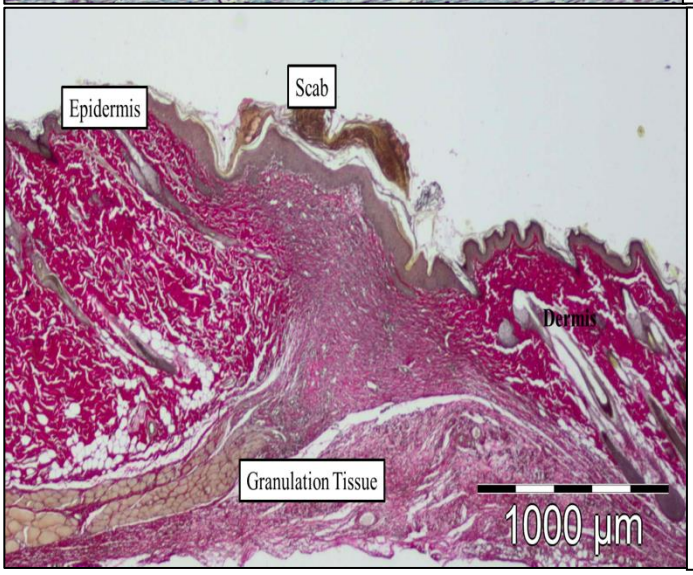

Figure 4.74: Wound area of Group GE (Gelam) on Day 15 of treatments. VE stained section. 100X Magnification. Complete epithelialization found on the wound.

Epithelialization was completed on Day 15 of treatments in Group GE (Gelam) (Figure 4.60D). The thickness of the epithelial cells layer was even and similar to the normal epidermis cells (Figure 4.71). The wound area could still be seen in the microscopic slides although epithelialization was completed. The situation reflected that the injured skin will never grow back to become 100% similar to the original skin. Although granulation tissue had reduced, it remained blue in color due to the abundance of the collagen fibers. Collagen fibers were dense and loosely arranged in the granulation tissue. Keratinization started on the surface of the skin (Figure 4.73). Less blood vessels were observed in the surface area and the size of blood vessels was reduced. The blood vessel was found to be abundant in the dermis layer. Fibroblast level decreased in correlation to the wound area being reduced (Figure 4.73). The blood vessels were still accumulated in the bottom part of the granulation tissue but the size had reduced (Figure 4.74).

Figure 4.75: Histology of wound of Group NE (Nenas) on Day 15 of treatments. H&E stained section. 40X Magnification. Complete epithelialization.

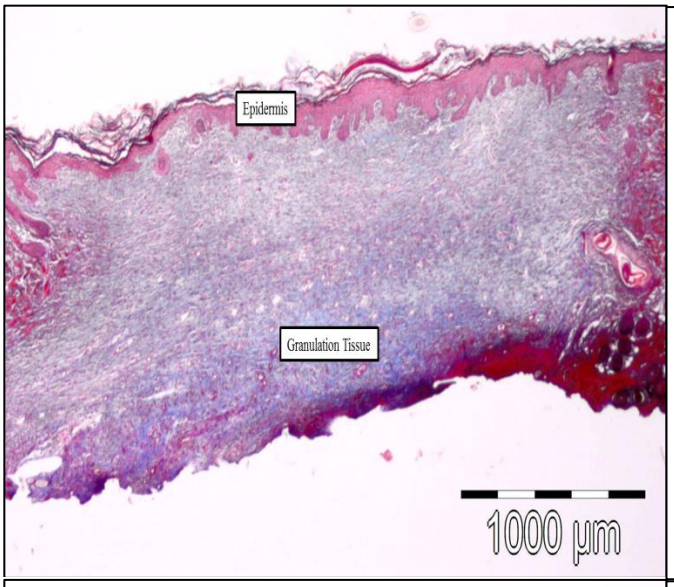

Figure 4.76: Granulation tissue of Group NE (Nenas) on Day 15 of treatments. MT stained sections. 20X Magnification.Wound area were stained in blue color. Blood vessels still seen in the granulation tissue.

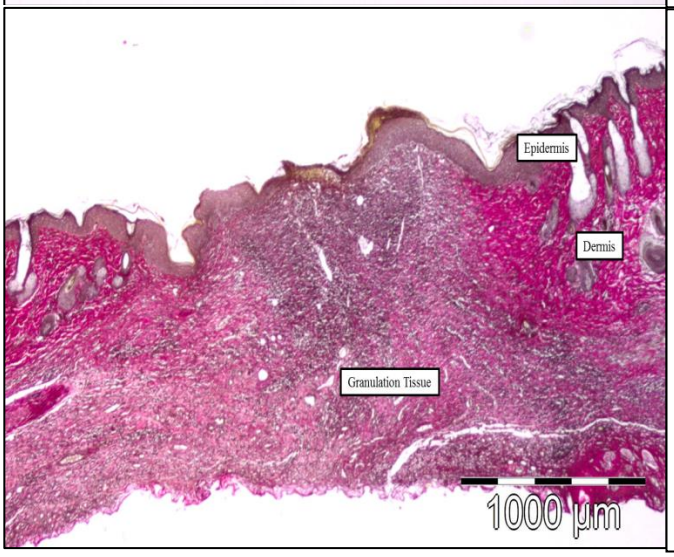

Figure 4.77: Granulation tissue of Group NE (Nenas) on Day 15 of treatments. VE stained sections. 20X Magnification. Epithelialization completed.

Results obtained from all these staining protocols showed complete epithelialization in wound of Group NE (Nenas) on Day 15 of treatments (Figure 4.60 E). The thickness of the epithelial layer healed of the wounds was similar to the normal epidermis tissue, with keratinization found on the surface. Area of granulation tissue decreased. Number and sizes of blood vessels in the granulation tissue were also reduced. MT stained slide showed the increase in collagen level. Fibroblast level became lesser and only accumulated near the newly formed epidermis (Figure 4.76).