Figure 3.1 Preoperative images of umbilical (a), right ventro-lateral (b), and left ventro-lateral (c) hernias in Jafarabadi buffaloes.
Figure 3.2 Preoperative radiographic (a) and ultrasonographic images of umbilical hernia (case no. 15) in Jaffarabadi buffalo.
Figure 3.3 Intraoperative images showing space between parietal peritoneum and internal rectus sheath (a), placement of caprine acellular dermal matrix between parietal peritoneum and internal rectus sheath with suture ends retrieved through abdominal muscles (b), placement of polypropylene mesh between parietal peritoneum and internal rectus sheath with suture ends retrieved through abdominal muscles (c), placement of polypropylene mesh to internal rectus sheath after tying of sutures on external sheath (d).
Figure 3.4 Intraoperative images showing a space between parietal peritoneum and transverse abdominis muscle (a), placement of polypropylene mesh between parietal peritoneum and transverse abdominis muscle, and tying of sutures on external abdominis muscle (b).
Figure 3.5 Postoperative images showing appearance of repaired umbilical hernia in a female Jafarabadi buffalo [Case no. 6, CADM (II)] (a), right ventro-lateral hernia in a male Jafarabadi buffalo [Case no. 19, PPM (II)] (b), left lateral hernia in a female Jafarabadi buffalo [Case no. 13, PPM (II)] (c).
Figure 4.1 Images showing adaxial (a) and abaxial (b) surfaces of native caprine skin (NCS), and abaxial surface of caprine acellular dermal matrix (CADM) (c).
Figure 4.2 Microscopic images of caprine skin after different de-epithelialization protocols (H&E; X 100; scale bar 100 µm).
Figure 4.3 Microscopic images of caprine skin after different treatments (H&E; X 100; scale bar 100 µm).
Figure 4.4 Microscopic images of caprine skin after different treatments (H&E; X 100; scale bar 100 µm).
Figure 4.5 Microscopic images of native caprine skin, de-epithelialized caprine skin and caprine acellular dermal matrix [MTS; X 100; scale bar 100 µm; (a, b, c)] and [WRF; X 100; scale bar 100 µm; (d, e, f)].
Figure 4.6 SEM images of native caprine skin (NCS) abaxial surface (a, b), adaxial surface (c, d), de-epithelialized caprine skin (DCS) (e, f) and caprine acellular dermal matrix (CADM) (g, h).
Figure 4.7 Spectra obtained of DNA absorbance after Nanodrop spectroscopy of native caprine skin (NCS), de-epithelialized caprine skin (DCS) and caprine acellular dermal matrix (CADM) showing peaks.
Figure 4.8 FTIR spectra of native caprine skin (NCS), de-epithelialized caprine skin (DCS), caprine acellular dermal matrix (CADM) and bovine skin collagen (BSC) showing different peaks.
Figure 4.9 Clinical follow-up showing recurrence of hernia in CADM (I) group (case no. 3) (a); swelling (case no. 15) (b), dehiscence and mesh infection (case no. 13) (c), and mesh infection (case no. 14) (d) in PPM (II) group.