WHAT IS CLAIMED IS:

1. A method for isolating and purifying mesenchymal stem cells from hernia sac, comprising the following steps:

   (a) cutting a hernia sac specimen into tissue pieces;

   (b) washing the tissue pieces and standing for a first predetermined time to form a supernatant and washed tissue pieces, then removing the supernatant;

   (c) adding a first medium to the washed tissue pieces and performing a homogenization treatment, followed by a resuspension treatment to form a mixture comprising the mesenchymal stem cells, filtering the mixture comprising the mesenchymal stem cells to obtain a filtrate, and inoculating the filtrate into a plastic flask for culturing for a second predetermined time; and

   (d) separating the mesenchymal stem cells attached on the plastic flask, then adding a second medium and continuing to culture for a third predetermined time, thereby purifying the mesenchymal stem cells;

   wherein the step (b) is performed without the addition of an enzyme,

   wherein the first predetermined time is 4-6 minutes,

   wherein the second predetermined time is 24-48 hours,

   wherein the third predetermined time is 7-10 days.

2. The method according to claim 1, wherein the tissue pieces have a volume of 1-2 mm^3.

3. The method according to claim 1, wherein step (b) is repeated no more than twice.

4. The method according to claim 1, wherein both the first medium and the second medium are alpha-minimal essential medium.

5. The method according to claim 4, wherein the first medium or the second medium is further supplemented with 10% fetal bovine serum (FBS) and 1% solution comprising penicillin and streptomycin.
6. The method according to claim 1, wherein in step (d), the mesenchymal stem cells attached on the flask are separated by trypsin.
7. The method according to claim 1, wherein the hernia sac is from inguinal hernia.
8. A use of mesenchymal stem cells from hernia sac for the manufacture of a medicament for tissue repair, the use comprising the following steps: (i) isolating and purifying mesenchymal stem cells from hernia sac by the method according to claim 1; and (ii) using the mesenchymal stem cells from hernia sac isolated and purified in step (i) in the manufacture of the medicament for tissue repair, wherein the first predetermined time is 4-6 minutes, wherein the second predetermined time is 24-48 hours, wherein the third predetermined time is 7-10 days.
9. The use according to claim 8, wherein the tissue repair is muscle tissue repair.
10. The use according to claim 8, wherein the tissue pieces have a volume of 1-2 mm^3.
11. The use according to claim 8, wherein step (b) is repeated no more than twice.
12. The use according to claim 8, wherein both the first medium and the second medium are alpha-minimal essential medium.
13. The use according to claim 12, wherein the first medium or the second medium is further supplemented with 10% fetal bovine serum (FBS) and 1% solution comprising penicillin and streptomycin.
14. The use according to claim 8, wherein in step (d), the mesenchymal stem cells attached on the plastic flask are separated by trypsin.