Claims

1. A medical body position retaining belt securing device, which is used for securing and releasing a medical body position retaining belt to and from an operating table side guide rail, characterized in that the medical body position retaining belt securing device comprises an upper clamping piece, a lower clamping piece and an elastic piece, the upper clamping piece or the lower clamping piece being coupled to the medical body position retaining belt, the upper clamping piece and the lower clamping piece being respectively provided with a clamping portion for clamping the operating table side guide rail, and two ends of the elastic piece respectively abutting against or being secured to the upper clamping piece and the lower clamping piece, and the medical body position retaining belt securing device can present a clamping state and an open state, wherein in the clamping state, the elastic piece moves the clamping portion of the upper clamping piece and the clamping portion of the lower clamping piece towards each other by virtue of an elastic force thereof, such that the medical body position retaining belt is secured to the operating table side guide rail, while in the open state, the elastic force of the elastic piece is overcome to move the clamping portion of the upper clamping piece and the clamping portion of the lower clamping piece away from each other, so as to release the medical body position retaining belt from the operating table side guide rail;

wherein the medical body position retaining belt securing device can further present a pre-use state in which an abutting portion of the upper clamping piece and an abutting portion of the lower clamping piece abut against each other by virtue of the elastic force of the elastic piece.

2. The medical body position retaining belt securing device according to claim 1, wherein the upper clamping piece or the lower clamping piece is coupled to the medical body position retaining belt through a retaining belt coupling piece, one end of the retaining belt coupling piece being secured to the medical body position retaining belt and the other end of the retaining belt coupling piece being secured to the upper clamping piece or the lower clamping piece.

3. The medical body position retaining belt securing device according to claim 1, wherein the elastic piece is arranged within an elastic piece containing portion of at least one clamping piece of the upper clamping piece and the lower clamping piece.

4. The medical body position retaining belt securing device according to claim 2, wherein the upper clamping piece and the lower clamping piece can pivot relative to each other about a pivot.

5. The medical body position retaining belt securing device according to claim 4, wherein the pivot is integrally formed on the upper clamping piece or the lower clamping piece.

6. The medical body position retaining belt securing device according to claim 5,

wherein the lower clamping piece or the upper clamping piece is provided with a slot, and a limiting piece is arranged within the slot to prevent the upper clamping piece and the lower clamping piece from transversely moving relative to each other.

7. The medical body position retaining belt securing device according to claim 4, wherein the pivot is separately formed and passes through the upper clamping piece and the lower clamping piece.

8. The medical body position retaining belt securing device according to claim 7, wherein one end of the pivot is provided with a pivot cap, and the other end of the pivot is connected with a securing screw to prevent the upper clamping piece and the lower clamping piece from transversely moving relative to each other.

9. The medical body position retaining belt securing device according to claim 1, wherein the elastic piece is a compression spring.

10. The medical body position retaining belt securing device according to claim 3, wherein one end of the elastic piece abuts against a bottom surface of the elastic piece containing portion of at least one clamping piece and the other end of the elastic piece abuts against the at least another clamping piece of the upper clamping piece and the lower clamping piece.

11. The medical body position retaining belt securing device according to claim 3, wherein the medical body position retaining belt securing device further comprises a sliding block inserted between the elastic piece and the at least another clamping piece of the upper clamping piece and the lower clamping piece and partially contained within the elastic piece containing portion.

12. The medical body position retaining belt securing device according to claim 1, wherein the elastic piece is a tension spring, a torsion spring or a leaf spring.

13. The medical body position retaining belt securing device according to claim 1, wherein the upper clamping piece and the lower clamping piece are extrusion-formed.

14. The medical body position retaining belt securing device according to claim 3, wherein at least one clamping piece provided with the elastic piece containing portion in the upper clamping piece and the lower clamping piece is provided with a ventilation hole at one end thereof, the ventilation hole being communicated with the elastic piece containing portion to facilitate the action of the elastic piece.

~~15. The medical body position retaining belt securing device according to claim 1, wherein the medical body position retaining belt securing device can further present a pre-use state in which an abutting portion of the upper clamping piece and an abutting portion of the lower clamping piece abut against each other by virtue of the elastic force of the elastic piece.~~

~~16~~15. The medical body position retaining belt securing device according to claim 2, wherein the other end of the retaining belt coupling piece is secured to the upper clamping piece by virtue of a screw rod.

~~17~~16. The medical body position retaining belt securing device according to claim 6, wherein the other end of the retaining belt coupling piece is secured to the upper clamping piece by virtue of a screw rod and the screw rod forms the limiting piece.

~~18~~17. The medical body position retaining belt securing device according to claim 2, wherein the upper clamping piece is provided with an arc-shaped step portion on a surface of the upper clamping piece secured with the retaining belt coupling piece, so as to realize a maximum deflection angle of 30º of the retaining belt coupling piece.

~~19~~18. The medical body position retaining belt securing device according to claim 1, wherein the lower clamping piece or the upper clamping piece is provided with a lug portion, so as to facilitate grasping by a user in use.

~~20~~19. The medical body position retaining belt securing device according to claim 1, wherein the clamping portion is a hook-shaped clamping portion.

~~21~~20. The medical body position retaining belt securing device according to claim ~~20~~19, wherein the shape of the upper clamping piece is designed in such a manner that an additional clamping force applied by the hook-shaped clamping portion of the upper clamping piece to the operating table side guide rail is multiply increased as an additional tensioning force of the medical body position retaining belt is increased.

~~22~~21. The medical body position retaining belt securing device according to claim 2, wherein the medical body position retaining belt securing device further comprises a gasket arranged between the retaining belt coupling piece and the upper clamping piece or the lower clamping piece.

~~23~~22. The medical body position retaining belt securing device according to claim 1, wherein the medical body position retaining belt securing device further comprises a sliding block, one end of the elastic piece abutting against or being secured to at least one clamping piece of the upper clamping piece and the lower clamping piece, and the other end of the elastic piece abutting against or being secured to the at least another clamping piece of the upper clamping piece and the lower clamping piece by virtue of the sliding block.

~~24~~23. The medical body position retaining belt securing device according to claim ~~23~~22, wherein the elastic piece and the sliding block are both arranged along a horizontal direction.

~~25~~24. The medical body position retaining belt securing device according to claim ~~23~~22, wherein the elastic piece and the sliding block are both arranged along a vertical direction.

~~26~~25. The medical body position retaining belt securing device according to claim ~~23~~22, wherein the sliding block is provided with an elastic piece containing portion and the elastic piece is at least partially contained within the elastic piece containing portion.