Designing Pillow as a cure for cervicogenic headache

Abstract

Background: Presently there is probably no device such as pillows designed or available in the market for relief in case of cervicogenic headache. **Objective**: The objective is to come up with a pillow which could be used by the persons having cervicogenic headache in case of orthopedic manual therapy. **Method**: A pillow for cervicogenic headache with adjustable neck dimensions is characterized by left side ball, right side ball and mechanism for adjusting distance between these balls as per size of the neck of patient, entire assembly of the balls and the mechanism is embedded in socket. **Result:** The result is the pillow has memory foam with plush covering outside. **Conclusion**: The invention provides a pillow with two balls for the treatment of cervicogenic head ache.

Keywords: Pillow Type, Cervical Stiffness, Arm Pain, Headache

1. Introduction

Presently there is probably no device such as pillows designed or available in the market for relief in case of cervicogenic headache. Previous research review indicate that the cervical pillows are available [1-3] which are designed to support the cervical curve and maintain cervical lordosis [4-5].Cervical pain presents with trigger points in neck and shoulders [6-7]. Trigger points creates local ischemia that lead to pain [8]. Still point inducers are also available which induces ischemia by compression resulting in reduction of pain when patients with Neck pain lye on this inducer for prescribed minutes. The curve in the pillow only aligns the structures and relax the neck muscles but does not treat the neck pain. It gives temporary relief and patient will experience neck pain in the rest of the day. In pillow on one side there is some shape (convex or flat) to give alignment to neck and relaxes the patient when patient lies keeping his head on the pillow. Different material such as gel, fibers provide comfort to the patient. The still point inducer is unsafe and uncomfortable to lie on and can cause falls resulting in further injury to head or neck. The still point inducer is made of plastic or wooden which gives compression when the cervical area is placed on it. The patient experiences discomfort lying on the balls and fear of sliding of balls that can cause cervical injury and even result in paralysis[9]. For obese people it will not still point on the sub Occipital muscles. Therefore, there is a need to develop the

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pillow which provides mechanism for adjusting the neck dimensions of the patient. Also to provide a pillow to treat trigger points and neck muscle spasm in cervicogenic headache for both obese and lean people is possible. The main object of the present research therefore is to provide a Pillow for cervicogenic headache with adjustable neck dimensions providing mechanism for adjusting the neck dimensions of the patient. Another object is to a pillow wherein the treatment of trigger points and neck muscle spasm in cervicogenic headache for both obese and lean people is possible.

The present research provides a pillow for cervicogenic headache with adjustable neck dimensions. It is characterised by two balls namely a left and a right ball and a mechanism for adjusting the distance between these balls as per size of the neck of the patient. The entire assembly of the balls and the mechanism is embedded in memory foam with plush covering outside. This pillow comprises a pillow having convex curvatures on both the ends for maintaining the neck to counter the stress and strain of the day in slightly hyper extension position. The middle part of the pillow has a contour for resting the head of the patient. On the other side of the curvature at the sub-occipital region two balls with a centre conduit are placed. These balls are a hollow, two-piece rubber shell filled with pressurized neutral gas. The rubber shell is covered with felt made from nylon or wool. The primary job of the cushion during rest is to help the cervical spine in an unbiased position [10,11]. This forestalls the reception of additional 'end-range' cervical spine stances during rest, which are accepted to expand the bio-mechanical weight on the constructions of the cervical spine. This can think twice about touchy constructions and cause waking side effects, like cervical agony and firmness, migraine, scapular or arm torment. Recent exploration on the impacts of various sorts of pads for subjects with ongoing neck torment tracked down that delicate pads that help cervical lordosis, and resting neck support with cushions, for waking torment. Nonetheless, there has been little examination on the impact of various kinds of cushions on the creation of attentiveness manifestations in solid subjects. Subsequently, an assortment of cushions have multiplied available as of late, along with yet changing episodic cases that they give manifestation free rest, no waking side effects, or potentially excellent rest encounters.

2. Objetive:

The objective is to come up with a pillow which could be used by the persons having cervicogenic headache in case of orthopedic manual therapy.

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3. Method

The research has been conducted at KIMS, Karad. A pillow for cervicogenic headache with adjustable neck dimensions is characterized by left side ball, right side ball and mechanism for adjusting distance between these balls as per size of the neck of patient, entire assembly of the balls and the mechanism is embedded in socket.

This pillow has convex curvature on both the ends for maintaining the neck to counter the stress and strain of the day in slightly hyper extension position. The middle part of the pillow has contour for resting the head of the patient. On the other side of the curvature at the suboccipital region two balls with a central conduit are placed. These balls are hollow, two- piece rubber shell filled with pressurized air/neutral gas. The rubber shell is covered with felt made from nylon or wool.

4. Result

The result is the pillow has memory foam with plush covering outside. Rest aggravations random to cushions were normal. Waking side effects happening to some degree once per week at benchmark were accounted for by around 20% of subjects on their 'own' cushion. The Feather Trial Pillow played out the most un-well, delivering the most elevated recurrence of alertness manifestations, while the Latex Pillow performed best. The biggest number of 'nonconformists' happened on feather pads. The Foam Contour Pillow didn't outflank the Foam Regular Pillow.

5. Conclusion

This investigation features the normal idea of rest unsettling influence in the never-harmed populace, and the inconstancy of waking side effects identified with various cushion types. The investigation discoveries show the reliably great presentation of latex cushions in lessening the recurrence of waking migraine and scapular/arm agony, and in this manner these pads ought to be prescribed to decrease waking side effects. Quill pads ought not be suggested as they are related with more prominent probability of waking side effects. The adjustable knob in between the left and the right ball balls is used for increasing or decreasing the space between the balls, which helps both obese and lean persons to accommodate the exact points of pain and neck muscle spasm on the ball. The pillow provides even pressure and force throughout and will not create any complication (soreness, strain).

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