Claims

1. A tooth holder comprising:

a circular rotating chuck fixed to a base;

the chuck including three jaws and a collar, whereby rotation of the collar extends or retracts the jaws thereby adjusting the aperture size between the jaws to allow a tooth to be held thereby;

irrigation means above the chuck for dripping liquid onto the tooth;

characterized in that the chuck includes a central channel through which liquid may be pumped.

2. A tooth holder according to claim 1 wherein the jaws are provided with grooves or steps to allow for precise measurement and placement of the tooth.

3. A tooth holder according to claim 1 for use in a method for isolating mesenchymal stromal cells comprising the steps of:

washing a tissue sample at least 3 times;

incubating the tissue sample in a solution comprising at least one antibiotic and at least one antimycotic at a temperature of around 28-38ºC and atmosphere comprising about 4-6% CO_2;

washing the tissue sample with phosphate buffered solution to remove antibiotic and antimycotic therefrom;

cutting the tissue sample into small pieces;

incubating the tissue sample in collagenase dissolved in DMEM-KO at a temperature of around 28-38ºC and atmosphere comprising about 4-6% CO_2 to produce a solution of tissue fragments;

centrifuging the solution of tissue fragments to form a pellet, which is resuspended and transferred into MSC culture media for subsequent incubation;

characterised in that MSC culture media is added to the tissue sample during the collagenase incubation to quench the action of the collagenase such that the tissue sample is only partially digested,

wherein the tissue sample is derived from dental pulp in which the initial washing of the tissue sample is with Dulbecco's phosphate buffered saline without calcium or magnesium, and

wherein the dental pulp is extirpated from a freshly extracted deciduous tooth, sectioned horizontally at the cementoenamel junction, while being irrigated.