
 **Mesenchymal stem cells for neurological disorders** (*Indian J Biochem.* 2015;52:140-6)

This study reports the use of intrathecally -administrated unibilical cord mesenchymal stem cells (UC-MSCs) in various neurological conditions. One hundred patients underwent subarachnoid placement of UC-MSCs. Technical difficulties in patients in the form of localization of subarachnoid space, number of attempts, and post-procedural complications were evaluated. Functional evaluation was done using Hauser Ambulation Index (HAI) by the stem cell transplant team on a regular basis. All patients were followed-up for more than a year after the treatment. Clinical symptoms, related biochemical index and photographic examinations were monitored. Side effects (headache, low-grade fever, low back pain and lower limb pain) were observed in 22% patients. One year after the treatment, functional indices improved in 47%: 12 patients with spinal cord injury, 11 patients with cerebral palsy, 9 patients with post-traumatic brain syndrome, 9 patients with post-brain infarction syndrome, 3 patients with spinocerebellar ataxias, and 3 patients with motor neuron disease. In conclusion, intrathecal administration of UC-MSCs appears to be a safe and effective way to treat neurological disorders.

These encouraging results of intrathecal administration of UC-MSCs indicate the potential of restoration of lost tissue and improvement of function in patients with profound neurological defects and inefficient conventional cure.

 **Intralesional corticosteroids for hemangiomas** (*Turk J Med Sci* 2015;45:335-8)

There are different modalities for management of infantile hemangiomas. In this report, the efficacy of intralesional corticosteroid treatment, and associated systemic side effects was investigated. Six children treated with intralesional corticosteroids for problematic hemangiomas were included in the study. Clinical characteristics, response to treatment, weight, height, blood pressure, morning serum cortisol, and adrenocorticotropic hormone levels were recorded. Each child received intralesional triamcinolone at a dose of 2 mg/kg for 2-5 injections at monthly intervals. These children were followed for one year. All patients had adrenal suppression following the second or third triamcinolone injections. Five patients demonstrated partial response and one demonstrated no response.

Intralesional steroid injection may effectively induce the resolution of hemangiomas, but is associated with adrenal suppression. The use of intralesional steroid therapy is not a superior treatment option for hemangiomas. It also has side effects comparable to systemic steroids.

 **Skin contact and analgesia** (*Clin Exp Obstet Gynecol.* 2015;42:304-8).

The aim of this study was to investigate the effect of skin contact between mother and child in pain relief of full-term newborns during heel blood collection. The authors randomly divided 40 full-term newborns into two groups. In the experimental group, the newborn received kangaroo care from the mother before, during, and after the 20-minute heel blood collection. In the control group, the heel blood collection was performed under conventional conditions. The authors compared the heart rate, oxygen saturation, facial expressions of pain and duration of crying in two groups. The heart rates of the two groups changed, and statistically significant differences were observed between the two groups. Findings related to oxygen saturation were also similar.

During heel blood collection, skin contact between the mother and child can relieve pain, reduce changes in heart rate, improve neonatal heel blood oxygen saturation, and enhance the emotional communication between the mother and child.

 **Septic arthritis and osteomyelitis** (*Am J Roentgenol.* 15;204:1289-95)

Osteomyelitis and septic arthritis clinically present at any age with overlapping signs and symptoms. The purposes of this study was to evaluate the demographic distribution of septic arthritis and osteomyelitis in children, and to explore optimal imaging guidelines for these patients. A retrospective study of children up to 18 years of age, who were treated for osteomyelitis or septic arthritis between January 2011 and September 2013 was performed. All patients underwent magnetic resonance imaging (MRI) without previous intervention. The reference diagnosis was based on the combined review by the orthopedic surgeon and infectious disease notes, discharge summary, operative report, and MRI examination. One hundred sixty-two children who underwent 177 MRI examinations were diagnosed with acute musculoskeletal infection. In children who underwent MRI for suspected musculoskeletal infection, septic arthritis was more prevalent in children under the age of 2 years than in older children. However, both septic arthritis and osteomyelitis were found frequently in older children. Musculoskeletal infection imaging workup guidelines for children of all ages should address the frequent association of osteomyelitis and septic arthritis. It is recommended that MRI should be used in the evaluation of suspected musculoskeletal infections in children, and the nearest joint should always be included to evaluate the extent of articular disease.

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