

**Methods:** We reviewed literature and emphasized major modern techniques used in cataract surgery. Also we present our comparative study of phacoemulsification and extracapsular extraction on a representative group of patients. We compare subgroups (treated by Phaco and EEC) using the following comparative criteria: age, residence, place of work, days of hospitalization, visual recovery and outcome after surgery, complications etc. Data were analyzed using modern statistical tools and have passed veracity tests (t-student criteria).

**Results:** Patients that underwent Phaco tend to have a shorter period of hospitalization, recover more quickly their visual performances, have fewer complications and in the end have a better outcome.

**Conclusion:** Contemporary management strategies should give to the patients the chance to choose and to be treated by best method. Phacoemulsification appears to be the gold standard in actual management of senile cataract. Thus we should inform patients and primary medicines that early diagnostic and treatment is mandatory for the best outcome.

**Keywords:** cataract, phacoemulsification, extracapsular extraction

## 87. THE ROLE OF NITRIC OXIDE IN THE CLINICAL EVOLUTION OF THERMAL BURNS IN CHILDREN

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**Introduction:** Nitric oxide ( $\text{NO}^-$ ) plays an important role in sepsis and polytrauma. The study shows that in thermal burns  $\text{NO}^-$  is increased.

**Materials and Methods:** Burns, Reconstructive Plastic Surgery Department, Institute of Mother and Child, Department of Surgery, orthopedics and pediatric anesthesiology of IP SMPPhU, "Nicholae Testemitanu", the Laboratory of Biochemistry of IP SMPPhU, "Nicholae Testemitanu". In the study were included patients aged 0-5 years, with thermal burns of II, IIIA -B, IV degree. Burn area was more than 10 % TBSA.

**Results:** In this research, a statistically reliable increase in the concentration of  $\text{NO}^-$  at all stages of clinical evolution in children with thermal burns was demonstrated: in the toxemia phase - by 41 %, after surgery - by 54 % compared with control group. This reflects a vascular hypoactivity, myocardial dysfunction, the need for specific fluid resuscitation, inotropic therapy to improve oxygenation as well as an adequate analgesia and acid-base resuscitation.

**Conclusions:** These data suggest that during the shock, in children with thermal burns, there is an increased level of  $\text{NO}^-$  caused by gram-positive and gram-negative bacteria, which have been identified in patients in the study. Also, the formation of large amounts of  $\text{NO}^-$  in the smooth muscles of blood vessels causes vascular hypoactivity (vasoplegia) to exogenous and endogenous vasoconstrictor agents. We conclude that our research suggests that  $\text{NO}^-$  is a central mediator of hemodynamic disbalances in burn shock.

**Keywords:** nitric oxide, thermal burns, children, burn shock

## 88. CHANGES IN SERUM TRANSFERRIN LEVEL IN THE CLINICAL COURSE OF THERMAL BURNS

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**Introduction:** Patients with severe burns present major multisystem pathophysiological changes. Pathophysiological imbalances include severe hypovolemia secondary to plasma loss, hypermetabolism and immune dysfunction. It is associated with septic complications, multiple organ failure syndrome, with triggers the systemic inflammatory response and infection. The uncontrolled development of these phenomena can lead to MSOF and, in some cases, to death.