

**Aim of study.** In the structure of injuries, cranio-cerebral trauma (CCT) has a high mortality. 5,3 million suffer from consequences of CCT. After 1year complications CCT was diagnosed in 10-50%. CCT and the severity of the condition of pregnancy determine the behavior of this group. The aim is to analyze the traumatogenesis of CCT in pregnant in the research group.

**Materials and methods.** 10-year study of 47 pregnant women with trauma, among them CCT in 25(53,19%)patients. Age 26,97±5,25. Investigations: neurosurgical, surgical, gynecological, traumatological examination; X-ray, CT. Study carried out within the project of AgencyNCercetareD no.20.80009.8007.11.

**Results.** Traumatogenesis CCT in the study group: road accidents 15(60%), of them 2 pedestrians (Glasgow 3,9; ISS 41,36), 7 car passengers; falls from body height 3(12%), physical aggression 7(28%). The average value of the severity of traumatic injuries: Glasgow 14,44±4,2p., ISS 19,48±8,67 points. Pregnant admitted to resuscitation departments (n=3), neurosurgery(n=3), neurology, etc. Management of patients depending on hemostability, neurological status and dynamic evaluation of the fetus. In study group diagnosed: subarachnoid hemorrhage (n=1), occipital bone fracture (n=1), rib cage fractures(n=2); fractures of the pelvis type A (n=3), femur(n=3); placental detachment(n=5), etc. Performed conservative treatment of CCT, traumatological interventions: external fixation of fractures; pregnant transferred to gynecology. In 20 women, the pregnancy was continued.

**Conclusions.** The etiological structure of CCT in pregnant women in the research group: road accidents 15(60%), falls from a height of the body 3(12%), physical aggression 7(28%). The study of the structure, frequency and complications of CCT in pregnancy makes it possible to improve the quality of birth by developing preventive, therapeutic and obstetric tactics.

**Keywords.** Cranio-cerebral trauma, pregnant

## TRAUMATISMUL ASOCIAT LA GRAVIDE CA FACTOR DE RISC



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**Scopul lucrării.** Traumatismul asociat (TA) al gravidelor prezintă factor de risc pentru rezultate nefavorabile mamei și fătului. Severitatea traumelor apreciată cu scalele AIS, ISS, ce definesc gradul leziunii anatomice, starea pacientului, în raport cu morbiditatea și mortalitatea. Scopul este analiza severității traumatismului asociat și aprecierea riscurilor pentru gravidă și făt.

**Materiale și metode.** Din 47 gravide posttraumatice, traumatismul asociat constatat în 41,46%(n=17). Pacientele internate cu diverse leziuni după accidente rutiere 16(94,11%), cădere 1(5,88%). Severitatea leziunilor: AIS=6,8±3,57; ISS=20,03±10,87, GCS=14,68±0,84. Starea gravă 10(58,82%) paciente. Studiu realizat în cadrul proiectului Agenției NCercetareD nr.20.800009.8007.07, 20.80009.8007.11.

**Rezultate.** Traumatismul asociat sever în fracturile bazinului: tip A-2(11,76%), (ISS-22;35p.); tip C-1(5,88%), (ISS=41 puncte). Pacienta cu fractura bazinului tip C, de urgență efectuată caezariană (făt mort), stabilizarea bazinului cu dispozitiv extern. Pacientele (n=2) cu leziuni pelvine tip A, tratate conservativ metoda Volkovich, caezariană la 28 săptămâni, nou-născuții (n=2) vii, (< 3kg), Apgar 5-6 puncte. Valoarea medie a severității leziunilor cu traumatism pelvin: ISS=25,66±13,42 puncte. Ca urmare a traumei la 4(23,52%) gravide avort spontan. Mortalitatea maternă 5,88%(n=1) cauzată de leziuni cerebrale severe incompatibile cu viață (AIS-13p., ISS-35p., Glasgow-3 puncte). Gravidele traumatizate (n=13) cu severitatea traumatismului de gradul I(ISS<17p.) nou-născuții sănătoși (Apgar 5- 8,03±0,85 puncte) la 39-40 săptămâni.

**Concluzii.** Severitatea traumatismului asociat matern este factorul de risc ce influențează prognosticul nefavorabil pentru mamă și făt. Gravidele cu traumatismul asociat, severitatea traumatismului de gradul I au născut copii vii și sănătoși; grupul cu severitatea de gradul II-III exodul nefavorabil pentru făt 29,41%(n=5) și gravidă 5,88%(n=1). Gravidele post-traumatice, necesită să fie expuse în grupul de risc și la evidență medicală.

**Cuvinte cheie.** Traumatismul asociat, gravidă, riscuri

## ASSOCIATED TRAUMA IN PREGNANT WOMEN - A RISK FACTOR

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**Aim of study.** Associated trauma (AT) in pregnant women is a risk factor for unfavorable outcomes. Trauma severity is appreciated by AIS, ISS scales, define the degree of anatomical damage, the patient's condition, in relation to morbidity and mortality. The aim is analysis of the associated trauma severity and risk assessment for the pregnant woman and fetus.

**Materials and methods.** Associated trauma was found in 41,46%(n=17) of 47 post-traumatic pregnant women. Patients were admitted after road accidents 16(94,11%), fall 1(5,88%). Injury severity: AIS=6,8±3,57; ISS=20,03±10,87, GCS=14,68±0,84. The study was carried out within support of NASD, project 20.800009.8007.07, 20.80009.8007.11.

**Results.** Severe AT was in pelvic fractures: type A- 2(11,76%), (ISS-22; 35p.); type C- 1(5,88%), (ISS=41p.) - urgent caesarean section (dead fetus), pelvis stabilization by external device. Patients (n=2) with type A pelvic injuries were treated conservatively by Volkovich method, caesarean section at 28 weeks, newborns (n=2) alive, (< 3kg), Apgar 5-6 points. ISS in pelvic fractures was 25,66±13,42. Spontaneous abortion appeared as a result of the trauma in 4(23,52%) cases. Maternal mortality – 5,88% (n=1) caused by severe brain injuries (ISS-35p., Glasgow-3p.). Patients (n=13) with trauma gr.I (ISS<17) had healthy newborns (Apgar 5- 8,03±0,85) at 39-40 weeks.

**Conclusions.** The severity of the maternal associated trauma is the risk factor that influences the unfavorable prognosis for mother and fetus. Pregnant women with minor associated trauma gave birth to healthy children; the group with trauma II-III gr. had unfavorable outcomes for the fetus 29,41% (n=5) and pregnant – 5,88% (n=1). Post-traumatic pregnant women should be in the risk group for medical follow-up.

**Keywords.** Associated trauma, pregnant woman, risks.