IS-009  Surgical Approaches in Children with Blunt Solid Organ Injury in Various Medical Institutions of the Primorsky Region

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Open surgery for solid organ injury (SOI) remains a preference in many non-pediatric hospitals in Russia. Our purpose was to compare the treatment strategies in non-pediatric hospitals to children with SOI in the Vladivostok Children’s Hospital (VCH) versus non-pediatric facilities: a general hospital (Vladivostok City Hospital #2; CH2); a small town general hospital in Primorye (Arsenyev Hospital; HA), a rural hospital (Nadejdinsk Hospital; NH). We conducted a retrospective review of treatment of 216 children with SOI under 15 years of age admitted during the period from 1993 to 2006.

Of 216 admissions, 142 were to VCH, 49 in CH2, 19 in AH, 6 in NH. The percent of polytrauma was 47.9 %, 87.7 %, 21.1 %, 66.7 % respectively. The mean ages were 9.98, 8.55, 9.89, 10.17 years. No hospital was equipped with CT; CH2 had 24 hours of ultrasonography (US) and laparoscopy (LS), VCH had on-call US & LS, AH & NH had US & LS only during the day shift (from 0800 till 1600 hours). The frequency of conservative laparoscopic & open surgical management was 90/16/36 cases for VCH, 5/1/40 in CH2, 4/0/15 in AH, 1/0/5 in NH respectively. Mortality was 1 at VCH (0.7 %), 11 in CH2 (22 %), 1 at AH (5 %).

The age & sex distribution were nearly identical at all hospitals. Children with polytrauma predominated at CH2 due to the availability of 24 hours neurosurgical and traumatology services at this hospital. However, despite of available diagnostic opportunities, non-pediatric surgeons utilized US & laparoscopy infrequently & performed surgery commonly with splenectomy routinely.