were evaluated and compared with the theoretical energy requirements.

**Results** Mean caloric intake on the first day was 59% (SD±46.4) and on the second day was 64.3% (SD±47.4) of daily requirements. 72(57.1%) patients received ≥80% of required daily calories, without a significant difference with patients who received <80% of daily calories, (p=0.3).

The overall mortality rate was 28.5%. Patients who received <80% of daily caloric needs were 4 times more likely to have a fatal outcome, compared to those who received ≥80% of daily caloric needs [OR=4.0 95% CI (1.2–12.7) p=0.01].

Daily caloric intake of ≥80% resulted a protective factor against death in the Cox proportional-hazard regression model (b=−1.1, p=0.02).

**Conclusions** We have to increase the number of patients who receive ≥80% of daily caloric requirements and provide appropriate nutritional support during the first days of admission. Mortality rate remains high, due to the large number of patients receiving <80% of needed calories.

**1466 MEDICAL RADIATION EXPOSURE IN CHILDREN DIAGNOSED WITH ACUTE LYMPHOCYTIC LEUKEMIA FROM 1995–2010: A SINGLE INSTITUTION STUDY**

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**Objective** This retrospective study examines a cohort of children diagnosed with acute lymphoblastic leukemia, examining exposure to medical radiation pre-conception, pre-natal or in early childhood. Exposure is documented through family interview. The study encompasses children diagnosed with A.L.L. and treated at the Children’s Hospital of Pittsburgh over a fifteen year period.

**Background** Early exposure to medical radiation is one of the identified risks for childhood leukemias but documentation is difficult and mostly lacking in the United States experience. The author of this study developed a questionnaire that examines radiation exposures in either parent of the child later diagnosed.

**Methods** Each family who was consented to be interviewed completed a five page questionnaire at clinic visit, through phone or mail. Whenever possible both parents were interviewed.

**Results** To date the author has been able to interview about 70% of children diagnosed from 2005–2010 however the interview rate for the period 1990–2005 is approximately at 5%. Among the families interviewed at least one exposure was commonly documented.

**Conclusions** Exposure to medical radiation for a child later diagnosed with A.L.L. may at occur at several critical junctures. Chest or sinus x-rays or CT of a parent pre-conception, particularly repeated scans have the possibility of DNA damage. Early childhood exposure through the diagnostic process (ruling out infection or trauma) may well contribute to this “perfect storm” in the still elusive causes of childhood A.L.L.