

小儿肠衰竭营养支持策略

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何为小儿肠衰竭？当小儿食物摄入肠道消化吸收等功能不能满足其生长发育需要时，称为肠衰竭。小儿常见原因包括：小肠淋巴管扩张症、短肠综合症、全消化道肠神经元发育不良、难治性腹泻、肠吸收不良综合症等。这些疾病的患儿常需要长期营养支持，相对出现的长期静脉营养支持相关的并发症等也较多，因此认识这些疾病的临床特征和合理营养支持至关重要。下面分别简述。

1. 小肠淋巴管扩张症：其典型表现为长期慢性腹泻和低蛋白血症及下肢水肿等，但诊断依赖于小肠镜或胶囊胃镜。营养支持以主要对症处理，开始肠外营养+白蛋白输注，逐渐选用富含中链脂肪酸的配方奶来替代肠外营养。定期随访+肠外营养(每周 1-2 次)。严密监测营养学指标。

2. 全消化道肠神经节发育不良：包括肠神经元性发育不良症、肠神经节细胞过少症、肠神经节细胞未成熟症等。患儿大都 1 岁内开始便秘，临床大多以先天性巨结肠首次予以结肠造瘘，但不久仍腹胀、便秘等再次手术。许多病孩多次结肠造瘘便秘和腹胀等症状仍未改善，需全消化道病理学才能诊断，最终只能选择空肠造瘘，导致短肠综合征。这些患儿因长期便秘、腹胀和多次手术等常伴有严重营养不良，因此给予合理营养支持尤显重要。这些患儿认识清楚、处理合理可以长期生存，反之常由于疾病反复，长期严重营养等并发症等而死亡。所以对这类患者早期认识早期营养支持至关重要。我们最近五年处理的 4 例，均最终为空肠造瘘或回肠造瘘，结果以饮食+肠内营养为主，不定期进行肠外营养支持的 2 例；只能靠肠外营养为主，肠内营养为辅的 1 例；死亡 1 例。

短肠综合症：新生儿常见原因是肠闭锁、坏死性小肠结肠炎、肠扭转、肠神经畸形等营养支持处理原则是，早期第一阶段（1 个月左右）以平衡水电解质为主、肠外营养为主、逐步建立肠内营养，第二阶段以肠外肠内营养联合应用，逐步过渡到以肠内营养为主，此阶段时间根据剩余小肠的长度、有无回盲瓣和/结肠等因素有关。第三阶段开始全肠内营养到正常饮食过度。我们最短小肠仅保留 20cm，应用

肠外营养 6 个月，肠内营养近 1 年，一年后完全脱离静脉营养。现已 8 岁，生长发育良好。我们对短肠综合征患儿脱离静脉营养后 2 年的 18 例进行随访发现，生长发育基本正常，但微量营养素缺乏较为常见，尤其锌、铁、维生素 A 等。因此短肠患者出院后应加强随访和积极给与微量营养素补充。

**Early lesions in small intestinal Crohn's disease:
An endoscopic and confocal endomicroscopic appraisal**

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The pathogenesis of Crohn's disease is complex and involves various factors that interplay in the initial and persistent damage to the intestinal tissue which begins at the mucosal layer with eventual spread to the other layers of the intestine. It probably involves defects in immunoregulation and maintenance of the mucosal barrier. But exactly how such functional changes are translated to morphological deformities is unknown and the earliest morphological changes, believed to be an aphthoid ulcer, has not been well characterized, especially in the small intestine.

Earlier attempts to identify early lesions of Crohn's disease involved in the search of subtle changes of inflammation in 'normal' areas of excised segments of small intestine in patients with the disease. Researchers postulated that such lesions in these surgical specimens adjacent to more severe lesions that warranted the surgical operation could allow a chronological sequence of events to be postulated, assuming that the subtle inflammatory and other changes could herald the development of full-blown pathological features generally being recognized as Crohn's disease.

Direct observation of the intestinal microstructure has been made possible with the advent of a new generation of endoscopes with high-resolution images and optical magnification. The resolution is above 1 megapixel in the video format, and the digital