

中华笔译大赛总决赛

英汉互译（医学）

一、外译中：请将如下英文译为中文。

Acute lymphoblastic leukemia (ALL) is a malignancy that affects a category of blood cells known as lymphocytes. ALL affects two types of lymphocytes: B cells and T cells. B cells protect the body by making antibodies against invaders, and T cells can directly attack cancer cells as well as help B cells do their job.

T-cell ALL (T-ALL) accounts for about 15% of pediatric patients with ALL, and it is more common in older adolescents and African American children and adolescents. Unfortunately, T-ALL is associated with shorter event-free survival (the time from treatment to disease progression or the development of certain symptoms) and overall survival compared with the more common B-cell disease.

Methotrexate is an anticancer drug that has been a mainstay of treatment of ALL for decades. Nevertheless, the most effective and least toxic schedule and dosing of methotrexate for T-ALL in pediatric patients has been unclear.

Two different approaches are commonly used to reach therapeutic levels (levels high enough to achieve effective treatment) of methotrexate in young patients with ALL; however, these have not been evaluated in the treatment of T-ALL. The first strategy is called Capizzi-style methotrexate (C-methotrexate, or C-MTX). It involves starting with a lower dose of methotrexate and increasing it over time. C-MTX is often coupled with PEG-asparaginase, another drug used to treat ALL. With high-dose methotrexate (HDMTX) therapy, patients receive the same high dose of methotrexate throughout treatment. HDMTX is often associated with kidney damage and other adverse events. For this reason, leucovorin (folinic acid) is started after treatment with HDMTX, to help mitigate toxicity.

The toxicity of HDMTX and the success seen with C-MTX in other cancers (including B-ALL) led researchers to examine which one was optimal in T-ALL. In the phase III AALL0434 trial led by the Children's Oncology Group, 1,000 patients were randomly assigned to receive C-MTX or HDMTX (with or without nelarabine). C-MTX treatment was superior in terms of 5-year disease-free survival and overall survival. Disease free survival was 91.5% and 85.3% for C-MTX and HDMTX, respectively. Overall survival was 93.7% and 89.4%. Patients assigned to C-MTX had 32 relapses, six involving the central nervous system. Those assigned to HDMTX had 59 relapses, 23 involving the central nervous system. Grade 3 and 4 adverse events during an interim maintenance phase were comparable and included febrile neutropenia and seizures. It is important to note, however, that cranial radiation was administered earlier for patients receiving C-MTX than for those receiving HDMTX, which could have influenced the outcomes.

Thus, the federally funded AALL0434 trial established that chemotherapy with

C-MTX is superior to HDMTX for T-ALL as administered in the protocol. Furthermore, the trial showed the best outcomes ever reported for children and adolescents with T-ALL. It showed a 5-year disease-free survival rate of 91.5% and overall survival rate of 93.7%. In comparison, the historical overall survival rate for T-ALL was approximately 81% based on earlier clinical trials in this patient population.

二、中译外：请将如下中文译为英文。

介入放射治疗术(IR)也称为影像导航术,是指在磁共振成像(MRI)、计算机断层扫描(CT)、X光和超声等影像设备的导航下进行诊疗的过程或手术。即,用针头和导管(窄管)穿刺入血管,直达病灶,产生图像用以引导手术过程。IR背后的理念是在对患者进行诊疗时,使用目前可用的侵入性最小的技术,把对患者的风险降到最低并提高治疗成果。IR不需要大切口,而只需要几个小切口,能显著降低感染风险、缩短恢复时间和住院时间。

20世纪60年代初,医学博士 Charles Dotter 开创了 IR。他发明了血管成形术和导管运送支架法,首次用于治疗外周动脉疾病。如今,IR广泛用于诊疗多种疾病,多个器官,涵盖血管系统、胃肠道系统、肝胆系统、泌尿生殖系统、肺、肌肉骨骼系统和中枢神经系统。

经皮穿刺介入治疗是否成功取决于针的定位是否正确。以血管内血栓切除术为例,医生在患者体表移动持针器,用以指引探查体内解剖结构并规划进针的路线。介入放射科医生选择最佳路线后,用持针器作为导航仪,以避免重要的器官与组织。然后,通过体表的微小切口,通常在腹股沟,利用实时 CT 引导,可以精确地导航特殊的导管和支架装置,使由于血凝块堵塞而无法获得供血的那部分大脑恢复血流。血流恢复得越快,卒中患者康复的机会越大。