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闭式瓣膜扩张术治疗风心病二尖瓣狭窄症

（附105例临床分析）

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提 要

本文分析了我院1975.6—1983.12对风心病二尖瓣狭窄105例。施行闭式扩张术基本情况，单纯二尖瓣狭窄72例，同时伴二尖瓣关闭不全者33例；经左径扩张者98例，右径者7例。治疗结果，早期死亡2例，早期病死率1.9%；术后随访7个月—8年75例，随访率71.4%，疗效良好与改善者89.3%，后期死亡2例。结合文献对闭式扩张术在二尖瓣狭窄外科治疗中的作用，病例选择及术中对狭窄瓣口扩张程度的掌握等进行了讨论。

随着体外循环下心脏瓣膜成形术和瓣膜置换术的临床广泛应用，对闭式扩张术治疗风心病二尖瓣狭窄的作用，评价不一[1-7]，现结合我们近几年来，对风心病二尖瓣狭窄，施行闭式扩张术基本情况，就此有关的手术病例选择和瓣口扩张程度掌握等问题，加以讨论。

资料与方法

我院于1975.6—1983.12，对105例风心病二尖瓣狭窄病人，施行了闭式扩张术，年龄最小者15岁，最大的46岁，20—40岁者89例(占84.8%，女性63例，男性42例，发病距离手术时间，一年以内者7例，2—10年者82例，10年以上者16例，（其中两例>20年）。

术前根据临床症状与体征、胸部X线片、心电图、超声心动图等项检查，诊断为单纯二尖瓣狭窄者72例，同时伴有轻度二尖瓣关闭不全者33例，105例中合并有心律不齐者15例，其中心房纤维性颤动8例，房性早搏5例，心房扑动和房室传导阻滞各一例。按五级分类法心脏功能Ⅱ—Ⅳ级，其中Ⅲ级者88例（占76.2%）。

手术采用静脉复合麻醉，经左胸行二尖瓣扩张者98例，经右胸者7例。术中证实属单纯二尖瓣狭窄者79例，而同时伴有二尖瓣关闭不全者26例，病变属单纯粘连型6例，纤维增厚型90例，瓣膜漏斗型9例。瓣口狭窄程度0.8cm以内者23例（其中<0.5cm者6例），0.8—1.2cm57例，1.2—2.5cm者25例。手术采用分次扩张方法，扩张程度<3cm13例，3—3.5cm87例（占82.9%），>3.5cm 5例，最大的为3.9cm。

治疗结果

早期死亡2例，早期病死率1.9%。1例因术中麻醉意外，缺氧性心骤停，复苏后次日死于心力衰竭。另1例为重度二尖瓣狭窄伴关闭不全，术中关闭不全加重，术后反复发生心力衰竭，于术后27日死于肺部感染。

主要并发症为创伤性二尖瓣关闭不全。

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除术前存在的26例以外（其中经扩张术后消失者8例，无明显变化者14例，较前加重者4例），手术发生的有22例、其次为心律不齐（包括心房纤颤6例，房性早搏与心房扑动各1例），肺部感染3例。

随访：术后经7个月至8年随访，获得记录者75例，随访率71.4%，疗效良好（心功提高两级者）57例，改善者（心功提高一级）10例，共67例，占89.3%；无变化者2例；恶化者2例，后期死亡4例（包括2例死于非心脏病）。

讨　论

一、关于闭式扩张术的评价问题

随着人工心肺机装置不断完善，临床应用技术不断提高，对风心病二尖瓣狭窄的外科治疗方法，由过去单纯闭式扩张分离术，发展到体外循环下，二尖瓣成形术或瓣膜置换术，因此，对闭式扩张术的应用，出现了一些不同的观点[1-7]，有人认为，为了减少闭式扩张术盲目性所带来的瓣膜分离不彻底，或引起创伤性二尖瓣关闭不全等不良后果，积极主张在体外循环下行二尖瓣成形术或换瓣术；而国内目前多数人则认为，闭式扩张术方法简单易行，长期疗效较满意，如兰锡纯等[1]1982年分析国内32个单位，近五年来所施行的6066例二尖瓣狭窄治疗中，运用闭式扩张术者5760例（占95.0%），早期病死率1.8%。潘治等[2]所施行的4756例二尖瓣狭窄扩张术的早期病死率为2.5%。本组病例早期病死率也仅1.9%，与前两者接近且经术后7个月至8年随访，结果良好与改善者占89.3%，因此，我们认为，在目前我国多数情况下，特别是在基层单位，只要病例选择的好，方法运用得当，闭式扩张术在二尖瓣狭窄的外科治疗中，仍应列为首选的方法。

二、病例选择

最好选择临床判断瓣膜病变较轻，瓣膜活动度较好，单纯性二尖瓣狭窄；或伴有轻度的二尖瓣关闭不全或心房纤颤，心功能Ⅱ—Ⅲ级，近期无明显风湿活动，年龄20—50岁者为宜，本组有8例手术年龄在20岁以下，其中有一例术后因风湿活动引起瓣口再度狭窄。对临床判断病变重，瓣膜活动度差，伴中度以上二尖瓣关闭不全，尤其在不具备体外循环条件下，随时需施行瓣膜成形或瓣膜置换术者，一般不宜选择闭式扩张术，本组有4例属瓣膜病变重、活动度差伴二尖瓣关闭不全，行闭式扩张术，其中1例术中加重了二尖瓣关闭不全，术后反复发生心力衰竭，终因合并肺部感染死亡，余3例术后疗效亦较差，应以为戒。

三、关于狭窄瓣口扩张程度

对狭窄瓣口原则上尽量扩大，最好达到前后交界瓣环，但实际上由于两个交界病变程度不同，术中常发生一个交界扩开，另一个交界则部分扩开，甚至完全不开的情况。因此，对狭窄瓣口扩张到何种程度为宜，必须结合每个病人具体情况而定，从本组术后病例观察看，开口扩大达3cm以上，又不发生或加重二尖瓣关闭不全者，疗效最为满意；但在同一组术中发生创伤性二尖瓣关闭不全22例（占20.9%），加上术中关闭不全加重者4例，共26例（占全组24.8%），术后随访结果表明，疗效差与死亡者大部分与二尖瓣关闭不全有关。为进一步提高手术疗效，首先认真选择病例，再是术中认真掌握好瓣膜口扩张的程度，严防创伤性二尖瓣关闭不全的发生或加重，否则，宁肯姑息一点。在分次扩张中，最后一次扩张幅度一般不宜过大，在两个粘连交界中，以粘连距瓣环最短交界程度为依据，酌情增加扩张幅度，避免一侧交界扩开不完全，另一侧交界引起撕裂等不良后果，还必须指出，一旦术中发生重度创伤性二尖瓣关闭不全，应予及早在体外循环下行瓣膜成形术或瓣膜置换术。

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Treatment of Mitral Stenosis with Closed Commissurotomy ——A Clinical Analysis of 105 cases

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This paper reports the results of 105 cases of mitral stenosis treated with closed commissurotomy. 72 out of the 105 cases were simple mitral stenosis while the remaining 33 were mitral stenosis complicated with mitral insufficiency of mild degree.

Before operation, the diameter of the stenosed orifice was smaller than 0.8 cm in 23 cases, between 0.8 and 1.2 cm in 57, and between 1.2 and 2.5 cm in 25. The leaflats of the valve were fibro-adhered in 6 cases and fibro-thickened in 90. In 9 cases the mitral valve was funnel in shape due to the shortening of chordae tendineae.

The operation was performed through a left thoracostomy in 98 cases and a right thoracostomy in 7. After dilatation, the diameter of the mitral orifice was smaller than 3 cm in 13 cases, between 3 and 3.5 cm in 87, and larger than 3.5 cm in 5. The largest diameter was 3.9 cm. Early postoperative death occurred in 2 cases and the mortality rate was 1.9%.

75 cases (71.4%) were followed up for 7 months to 8 years respectively. Good results with marked improvement occurred in 67 cases (89.3%), no change in 2,

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poor results with worsened condition in 2. Two cases died during the follow-up course.

In addition, the role of closed commissurotomy in the treatment of mitral stenosis, the selection of patients, and the optimal dilatation of the orifice were discussed according to the clinical data.

（上接380页）

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Clinical Analysis of Antiglaucomatous Operations on 266 Eyes

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The near therapeutic effect of antiglaucomatous operations of various kinds on 266 eyes of 194 patients with various types of glaucoma were evaluated. 82 eyes of 61 patients out of those were followed up from 10 to 193 months(an average of 69 months) and thus the remote therapeutic effect was observed in these cases. In general the near operative results of this series was similar to those of the concurrent reports by other authors, but the remote effect was not satisfactory. Invariably, the therapeutic effect deteriorated as the time went by. The possible factors which led to the deterioration of the therapeutic effect were discussed by the author.

Altogether 19 kinds of operative methods were used and four of them, Scheie's operation, subscleral sclerenclesis, interlamellar Scheie's operation and trabeculectomy were the main methods used. It was found that trabeculectomy resulted in high percentage of success in controlling the intraocular pressure and brought about rather few complications. It was suggested that trabeculectomy be the operation of choice for the treatment of glaucoma.

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