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# 生殖道衣原体、支原体感染与盆腔炎症的相关性分析 *

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**摘要 目的:**探讨女性生殖道衣原体、支原体感染发生与盆腔炎症的相关性,并为相应人群提出相应的预防和治疗措施。**方法:**对我院 2012 年 1 月到 2013 年 5 月诊治的盆腔炎患者 280 例及 60 名健康妇女进行了衣原体、支原体的培养,采用试剂盒进行检查,并进行药敏实验,分析比较两组生殖道衣原体和支原体感染情况。**结果:**盆腔炎症组中衣原体感染的检出率为 58.5%,支原体感染率为 26.2%,衣原体合并支原体感染率为 12.4%。健康妇女组衣原体感染、支原体感染及衣原体合并衣原体感染的检出率分别为:9.1%,6.2%和 4.9%。两组的差异有统计学意义(P<0.05)。在盆腔炎症患者组中,<30 岁人群中单纯衣原体感染和单纯支原体感染检出率分别为 51.3%和 26.4%,均要明显高于 30 岁以上的人群,差异有统计学意义(P<0.05)。**结论:**盆腔炎症与生殖道衣原体,支原体感染有密切的相关性,盆腔炎的发病可能与生殖道衣原体、支原体感染有关,针对临床上盆腔炎患者应密切关注生殖道支原体、衣原体的感染问题。

**关键词:**支原体;衣原体;盆腔炎症

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# Correlation Between the Pelvic Inflammation and Infection of Genital Chlamydia Trachomatis or Ureaplasma Urealyticum*

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**ABSTRACT Objective:** To investigate the correlation between the pelvic inflammation and infection of genital chlamydia trachomatis or ureaplasma urealyticum and to provide corresponding prevention and treatment methods for such patients. **Methods:** 280 pelvic infectious cases and 60 healthy women in our hospital from Jan 2012 to May 2013 were selected for pathogen culture. Kit was adopted for inspection and drug sensitive experiments were managed. Both the chlamydia and mycoplasma infection in the genital tract of the two groups were analyzed and compared. **Results:** The chlamydia trachomatis infection detection rate of pelvic inflammation group was 58.5%, the ureaplasma urealyticum infection detection rate was 26.2%, chlamydia trachomatis merger ureaplasma urealyticum infection rate was 12.4%. For healthy women group, chlamydia trachomatis, ureaplasma urealyticum and chlamydia trachomatis infection complicated by ureaplasma urealyticum infection detection rate were, 9.1%, 6.2% and 4.9%, respectively. The differences between two groups were statistically significant (P<0.05). In group of patients with pelvic inflammation, crowd < 30 years old suffered pure chlamydia trachomatis and ureaplasma urealyticum infection rates were 51.3% and 26.4% respectively, both significantly higher than those of people over the age of 30, and the difference was statistically significant (P<0.05). **Conclusion:** There is a close correlation between pelvic inflammation and genital tract chlamydia trachomatis, ureaplasma urealyticum infection,and the onset of pelvic inflammatory disease may be linked to genital tract chlamydia trachomatis, ureaplasma urealyticum infections. More close attention should be paid to the genital tract ureaplasma urealyticum and chlamydia trachomatis infection patients with pelvic inflammatory disease.

**Key words:** Ureaplasma urealyticum; Chlamydia trachomatis; Pelvic inflammation

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## 前言

盆腔炎症是女性好发的一类上生殖道炎症性疾病的统称，包括子宫内膜炎、输卵管炎及盆腔腹膜炎等。其感染原因多通过阴道上行感染所致，是性传播疾病的主要并发症之一[1,2]。目前研究发现，生殖道支原体和衣原体感染而致盆腔炎症的发病率逐年增高，与盆腔炎症发病有关的主要是解脲支原体（Uu）和沙眼衣原体（Ct），因此有学者提出 Uu 和 Ct 感染是盆腔炎症发病的重要原因，这方面研究也受到了医学界很大的关注[3,4]。本文旨在探讨女性生殖道衣原体和支原体感染与盆腔炎症之间的相关关系，特选取我院盆腔炎患者 280 例及健康女性 60 例进行宫颈分泌物培养检测并进行对照，现报道如下：

## 1 资料与方法

### 1.1 一般资料

本研究组随机选取 2012 年 1 月到 2013 年 5 月于我院妇产科首次确诊为盆腔炎症的患者共 280 名，之前无急慢性盆腔炎史，年龄为 18~45 岁，平均年龄为 29± 8.9 岁，并同时随机选取同期来院检查或治疗的健康女性 60 名作为研究对象，无急慢性盆腔炎史，年龄为 19~43 岁，平均年龄为 26± 7.5 岁。两组均为已婚或未婚有性生活史的女性，在年龄等其他一般条件上两组无明显差异。

### 1.2 标本采集及处理

利用窥阴器暴露患者宫颈，用消毒棉签先擦去宫颈外口分泌物，然后用棉试纸插入宫颈约 2 cm 左右，顺时针旋转一周，将采集到宫颈分泌物的棉试纸取出置入无菌试管内送检，进行支原体及衣原体的培养并进行药敏实验。

### 1.3 统计学方法

全部试验数据由 SPSS13.0 软件分析并处理，数据采用 $\bar{x}\pm s$ 表示，实验数据行 $x^2$ 检验，取 P<0.05 为有统计学差异。

## 2 结果

### 2.1 两组患者生殖道衣原体、支原体感染情况

盆腔炎患者中，衣原体感染率为 58.5%，支原体感染率为 26.2%，支原体合并衣原体感染率为 12.4%。对照组中，衣原体感染率为 9.1%，支原体感染率为 6.2%，支原体合并衣原体感染率为 4.9%。两组比较，盆腔炎患者支原体感染、衣原体感染及支原体合并衣原体感染率均明显高于相应的对照组，差异有统计学意义，P<0.05。具体情况见表 1。

Table 1 The Uu and Ct infectious results by culture of the two groups

| Groups | Cases(n) | Uu infection | Ct infection | Ct+Uu |
|---|---|---|---|---|
| PID | 280 | 73(26.2%) | 164(58.5%) | 35(12.4%) |
| Control | 60 | 4(6.2%) | 5(9.1%) | 3(4.9%) |
| $X^2$ | | 22.7834 | 6.5012 | 6.4981 |
| P | | <0.0001 | 0.0110 | 0.0110 |

### 2.2 不同年龄盆腔炎患者支原体、衣原体感染情况

单纯衣原体感染、单纯支原体感染及衣原体合并支原体感染率均随盆腔炎患者年龄增长有降低的趋势。支原体感染在 30 岁以下，30~40 岁及 40 岁以上人群感染率分别为 32.4%，21.7%和 16.3%。衣原体感染在 30 岁以下，30~40 岁及 40 岁以上人群感染率分别为 57.3%，67.4%和 44.9%。支原体合并衣原体感染在 30 岁以下，30~40 岁及 40 岁以上人群感染率分别为 15.1%，10.8%和 8.2%。单纯衣原体感染 30 岁以下人群与 30~40 岁人群之间无差异，其余均随年龄增长而降低，且差异有统计学意义，P<0.05。

Table 2 Difference of Ct and Uu infection between different ages

| Ages(y) | Cases(n) | Uu infection | Ct infection | Ct+Uu |
|---|---|---|---|---|
| <30 | 139 | 45(32.4%) | 80(57.3%) | 21(15.1%) |
| 30~40 | 92 | 20(21.7%) | 62(67.4%) | 10(10.8%) |
| >40 | 49 | 8(16.3%) | 22(44.9%) | 4(8.2%) |

### 2.3 培养阳性患者药敏实验结果

针对培养结果阳性的患者行药敏实验，采用常用的 8 种抗生素进行。药敏检测结果交沙霉素敏感率最高，其次为强力霉素，其余详细结果见表 3。

## 3 讨论

生殖道支原体、衣原体是存在于女性下生殖道的正常菌群，在人体抵抗力降低或在某些疾病条件下才会引起机体致病，具有条件致病的特性[5,6]。生殖道支原体、衣原体感染是常见的性传播疾病，在西方国家甚至占到性传播疾病的首位[7]。女性感染后，病理上该类病原菌有很强的组织破坏后致炎症能力，加重炎症反应及局部损伤反应，最终导致炎症的发生[8,9]。但是病人在临床症状上常不明显，大部分的病人无自觉症状，少数病人有时可有轻微的下腹部疼痛感[10]，或阴道分泌物增多或阴道血性分泌物[11]。因此，早期诊断显得比较困难，但是阴道分泌物检查可以起到很好的筛查作用[12,13]。

盆腔炎症是女性好发的一类疾病，研究表明支原体、衣原体感染的女性易患盆腔炎症。但是盆腔炎的具体患病机制仍在进一步研究过程中[14,15]。本研究组中显示，盆腔炎患者中的衣原体感染率为 58.5%，支原体感染率为 26.2%，支原体合并衣原体

Table 3 Results of drug sensitive experiment

| Antibiotics | Uu(n, 77 cases) | | | Ct(n, 169 cases) | | | Ct+Uu(n, 38 cases) | | |
|---|---|---|---|---|---|---|---|---|---|
| | S | MS | R | S | MS | R | S | MS | R |
| Azithromycin | 24 | 26 | 27 | 56 | 54 | 59 | 12 | 13 | 13 |
| Roxithromycin | 12 | 25 | 40 | 28 | 68 | 73 | 6 | 15 | 17 |
| Levofloxacin | 26 | 29 | 19 | 58 | 56 | 55 | 14 | 15 | 9 |
| Josamycin | 27 | 26 | 24 | 56 | 51 | 62 | 14 | 11 | 13 |
| Sparfloxacin | 43 | 16 | 18 | 102 | 34 | 33 | 21 | 7 | 10 |
| Doxycycline | 61 | 14 | 2 | 112 | 43 | 14 | 26 | 11 | 1 |
| Ofloxacin | 4 | 35 | 38 | 14 | 79 | 76 | 2 | 18 | 18 |
| Clindamycin | 11 | 32 | 34 | 41 | 65 | 63 | 7 | 19 | 13 |

**注**:S- **敏感**;MS- **中度敏感**;R- **耐药**。

Note S-Sensitive; MS-Midelle Sensitive; R-Resistance

感染率为 12.4%,都要明显高于(P<0.05)健康人群,健康人群中衣原体感染感染率为 9.1%,支原体感染感染率为 6.2%的,支原体合并衣原体感染感染率为 4.9%。这表明盆腔炎症与患者支原体、衣原体感染有一定的正相关性。但究竟是支原体、衣原体感染所致的盆腔炎症还是盆腔炎症发病使得患者更易感染支原体、衣原体还有待进一步佐证。总之,消灭女性生殖道支原体、衣原体感染可以降低盆腔炎症的发生。

本研究组还显示,盆腔炎症患者中支原体、衣原体感染率随着年龄的增加而降低。大致分为 30 岁以下人群和 30 岁以上人群两类,两类人群生殖道支原体、衣原体感染率有明显的差别(P<0.05)。说明此类感染多发于性生活较频繁的年轻女性一代,据统计,该类感染在青春期女性中的发生率可达 10%~20%[16,17]。临床上应予以重视,并采取相应的预防感染措施,防止支原体、衣原体的逆行性感染,而致炎症。如杜绝一切不洁性行为,养成良好的生活习惯,此外这类人群还应定期去医院检查,争取早期筛查发现。

前已述及,支原体、衣原体感染早期临床症状很不明显,极易漏诊。而宫颈分泌物支原体、衣原体培养是比较可靠的早期筛查方法[18,19],应提倡青年女性尤其是盆腔炎症患者定期做此项检查。通过培养,鉴定及药敏试验结果,为盆腔炎症患者支原体、衣原体感染的治疗提供很好的临床依据[20]。对于培养阳性的支原体、衣原体感染患者,应根据药敏实验结果,早期足量的使用敏感的抗菌药物进行彻底有效地抗菌治疗,对提高盆腔炎的治愈率,改善盆腔炎预后有着重要的临床意义。

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