

# 大腸憩室疾病之最新進展

簡乃宣<sup>1</sup> 李嘉龍<sup>1,2,3</sup>

<sup>1</sup> 臺北國泰綜合醫院 胃腸科

<sup>2</sup> 新竹國泰醫院

<sup>3</sup> 臺北醫學大學醫學院醫學系

## 摘要

憩室疾病是臨床上常見且古老的問題，近年隨著年齡老化與生活西化，憩室疾病發生率與重要性也持續上升，我們回顧了許多最近的研究與臨床報告，更新了許多傳統的思維，包含了高纖食物無法預防憩室疾病的發生、種子類食物不會引發憩室炎、電腦斷層的廣泛應用可以幫助疾病嚴重程度的分級、益生菌與抗發炎藥物的使用可幫助憩室炎的症狀控制、抗生素的使用在無併發症的憩室炎上可趨於保守等等，另外多篇報告也指出憩室炎的復發率與復發嚴重度並沒有傳統認為的厲害，因此目前共識不再建議預防性手術使用在復發性憩室炎患者身上。對於有腹內膿瘍或是腸破裂徵象的病人，因其晚期併發症較多，而較常進行手術治療，至於腹腔鏡手術的使用，與開刀中使用何種術式 (Hartmann procedure or primary anastomosis)，目前成未定論，需視病人的狀況做個別的規劃。

**關鍵詞：**憩室疾病 (Diverticular disease)  
憩室炎 (Diverticulitis)  
Modified Hinchey 分類 (Modified hinchey classification)  
Kaiser 分類 (Kaiser classification)  
復發與預防性手術 (Recurrence and elective surgery)  
高纖食物 (High fiber diet)

## 前言

憩室疾病是個古老的問題，在臨床上屢見不鮮，但隨著台灣西化以及族群的老化，憩室疾病的發生率持續上升，其重要性也相對提升，近年來許多研究與回顧性報告<sup>1-3</sup>指出傳統的思維，似乎與臨床狀況並不相同，本篇回顧了近年來的研究並重新整理憩室疾病的相關成因、分類、病史、治療、手術原則等等，其分述如下。

## 分類

探討憩室疾病之前必須先了解其分類，不同的疾病程度有不同的治療方式，在分類上大約可以分為 uncomplicated diverticular disease 與 complicated diverticular disease，若病人合併有 inflammation, abscess, free perforation, fistula, stricture, or obstruction 等問題，則歸類為 complicated diverticular disease。其中 uncomplicated diverticular disease 亦可依症狀的有無分為 asymptomatic

uncomplicated diverticular disease 與 symptomatic uncomplicated diverticular disease (SUDD)。而 complicated diverticular disease，亦即臨床上常見的憩室炎，又可分為 uncomplicated diverticulitis 與 complicated diverticulitis (圖一)。

在 complicated diverticular disease 中又可依臨床表徵與電腦斷層數據，按照疾病程度再予分類，臨床上常見的分類很多，最常被人們使用的為 Modified Hinchey classification 與 Kaiser classification<sup>4,7</sup>(表一)。

### 憩室的成因與影響因子

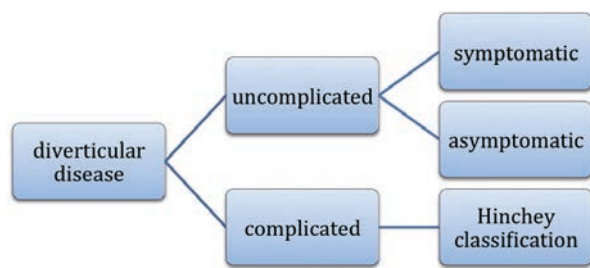
了解疾病成因可以有效地預防及治療疾病，現今有關於憩室成因的理論大約可以分成，腸組織結構與動力學影響兩部分。首先，在先前研究中，發現患有憩室的大腸組織電子顯微鏡切片中，有較多 elastin 與 collagen 成分<sup>8-11</sup>，而正常人腸組織切片則無該現象。其次，早期 Painter 的研究中發現，大腸為階段性蠕動，產生 little bladders，若蠕動狀況不良可引發區域腸內壓力上升，繼而形成憩室<sup>12-13</sup>，後續的研究中，發現具有憩室的病患，有較強的 cholinergic nerves 與較弱的 nonadrenergic, noncholinergic inhibitory nerves 反應<sup>14</sup>，同時有

較少的 serotonin transporter expression 和 Cajal 細胞，而在正常人身上則沒有類似問題<sup>15-17</sup>，另外在服用鈣離子阻斷病患身上，可以發現有較少的 perforated diverticulitis<sup>18</sup>，都指向腸內壓力上升與蠕動異常可能引起憩室。

對於憩室疾病的影響因子，之前的報告中整理出了許多要素，然而最近的研究亦提供了許多新數據。首先，年齡的提升、居住於經濟狀況較好的國家<sup>19,20</sup>(例如 Painter 發現西方國家有較高的憩室疾病發生機會，在非洲國家則相當少見，前研究也發現新加坡與以色列的憩室疾病比例有上升趨勢<sup>21,22</sup>，可能跟生活西化相關)、患有 Connective tissue diseases 與患有神經疾病等等，都會增加憩室疾病的發生率。

其次，早先的共識，High dietary fiber intake 可以減少憩室疾病發生率，其原因來自於 Painter 的研究發現缺少纖維素的飲食，可能會引發便秘與腸內壓上升，進而引發憩室，同時間 Burkitt 的研究也指出西方飲食會造成腸排空時間延長<sup>23</sup>，因此高纖飲食一直是熱門的建議。然而最近的研究則有不同證據，Peery 等人追蹤 2,014 人約 13 年(1998~2010)時間，比較他們飲食與大腸鏡憩室比率，發現高纖維飲食的人反而有較高的憩室發生率<sup>24</sup>，此研究使高纖飲食是否為保護因子呈現未定論。不過 Crowe 等人對於英國 47,033 人的研究發現在憩室疾病中，vegetarian diet 有較少的住院率與死亡率<sup>25</sup>，類似的數據在美國的相關研究中也未被發現<sup>26</sup>。

第三，過去五十年間，堅果、玉米、種子類食物，一直被認為憩室病患應避免服用，主要理論認為其可能會造成憩室阻塞，進而引發併發症，然而近來 Strate 等人在一項 47,228 人



圖一：憩室疾病分類。

表一：憩室炎臨床分類

	Modified Hinchey classification by Wasvary et al <sup>4,5</sup>	CT findings by Kaiser et al <sup>6</sup>
0	輕微憩室炎	憩室 ± 大腸壁增厚
Ia	大腸周圍局限性發炎或積液	腸壁增厚合併周圍組織變異
Ib	大腸周圍或腸繫膜膿瘍	Ia 變化合併大腸周圍或腸繫膜膿瘍
II	骨盆腔、腹內遠處或後腹腔膿瘍	Ia 變化合併遠處膿瘍 (通常在骨盆腔或 interloop 區域)
III	廣泛性積液腹膜炎	可見 free gas 合併有區域或廣泛性腹水，腹膜可能增厚
IV	廣泛性糞便腹膜炎	同 III

參與的研究中發現，增加種子類食物使用，可以降低憩室炎風險<sup>27</sup>。

其他，在幾項大規模的研究中發現，抽煙與肥胖會增加憩室炎與併發症的風險<sup>28-32</sup>，增加運動量與較高的 Vitamin D 血清濃度則有減低風險效果<sup>33-35</sup>，而使用 Nonsteroidal anti-inflammatory drugs、opioids 與 corticosteroid 會增加 perforated diverticulitis 風險<sup>36-39</sup>。

## 自然病史

### 一、Clinical features

在臨床表徵上，若為 symptomatic uncomplicated diverticular disease (SUDD)，在臨床上表現大都主訴左下腹疼痛，但病人亦可有腹脹、便秘、腹瀉、黏液便等主訴，在理學檢查中，可能呈現正常、腹脹、輕微壓痛等症狀。

若憩室有感染或發炎時，則稱為 complicated diverticular disease，在有憩室的病人身上約有 10~25% 機率<sup>40</sup>，但隨著大腸鏡檢的盛行，憩室炎的發病率似乎有向下修正的狀況<sup>41</sup>，致病機轉上被認為可能是糞便阻塞憩室出口，以及憩室黏膜遭糞便擦傷，影響憩室靜脈回流，造成區域菌落改變，繼而引發發炎與感染反應。在臨床表徵上，仍以腹痛為主，在西方國家多以 sigmoid colon lesion 等左下腹症狀為主，但在東方國家則多以右側結腸等右下腹症狀較為常見，其他便秘、腹瀉、噁心、嘔吐、食慾不振等症狀亦可被觀察到。理學檢查則多以壓痛為主，有時候當 abscess 形成時可以摸到腫塊，發燒亦為常見的發現。

年輕人（小於 40 到 50 歲）憩室炎的狀況，傳統上發生率較低，且大多為男性，但隨著時代的改變，發生率似乎有增加趨勢，早期一直被認為有較嚴重的症狀，但亦有持不同觀點而沒有共識，Katz 等人<sup>42</sup>對於 4982 人的研究中發現，確實年輕人憩室炎以男性為主，但對於預後、併發症等和老年人相比則無統計上差異，但復發率卻有統計意義上的升高。

### 二、Recurrence risk and Elective Surgery

在過去的觀念中，憩室炎的再發率在 7~63%

間都有人報告，一般認為再發的憩室炎，對於內科治療反應較差，同時有較高的死亡率，故在早期的共識中，復發的憩室炎建議 Elective Surgery，以減少後續的病發症。然而，最近許多大型報告持有不同的觀點，Broderick-Villa 等人<sup>43</sup>在 3165 病人的研究中發現，2366 人患有憩室炎，在其後的 8.9 年追蹤，復發率為 13.3%，僅有 3.9% 病人有二次復發，且二次復發病人皆無需接受手術治療。在 2010 的報告<sup>44</sup>中則指出，復發率約為 23%，二次復發率為 4.7%。Binda 等人<sup>45</sup>的研究中，義大利 320 病人 10.7 年的追蹤中，22% 病人復發需要再次住院，17% 病人則需要接受手術治療，在年紀小於 50 歲與復發超過三次的病人身上，比較有開刀的風險，整體復發的風險比舊有的資料來的低。Scott 等人<sup>46</sup>整理了 2000 年以來 68 篇研究，亦發現 complicated recurrence 在 uncomplicated 憩室炎病人身上相當低 (<5%)，Prophylactic surgery 現階段不被常規建議使用，需要按照每個病人的狀況分別考量，若病人有 extraluminal abscess 或 pneumoperitoneum，因較易有併發症與腸破裂風險，比較需要手術介入。另外，病人若合併有 immunosuppression、collagen vascular disease、glucocorticoid use、malnutrition 等問題，較會有復發與腸破裂的風險，在預防性切除的標準可以放得較寬鬆，但同樣的其開刀風險也會相對提高。

### 三、Chronic symptoms

Nelson 等人<sup>47</sup>在追蹤 99 患有憩室炎病人研究中發現，大約一半會有慢性憩室炎與症狀，慢性憩室炎包含了 chronic recurrent diverticulitis 與 segmental colitis 兩種，其中 segmental colitis 意指憩室附近腸黏膜發炎所引發的疾病。在義大利 56 人的研究中發現慢性的症狀包含了 abdominal pain/discomfort、bloating、tenesmus、diarrhea、abdominal tenderness、fever、dysuria 等<sup>48</sup>，在生活品質的評分上會有所影響。在另外 124 人的研究中也發現，若患有憩室疾病的人患有慢性腹痛的風險是一般人的四倍<sup>49</sup>。但同時在一 784 病人的研究中發現，上述所描述的症狀，在患有憩室疾病與一般人身上並無有

意義的差別<sup>50</sup>，對於生活品質也沒有造成有意義的影響。其他研究則指出，患有憩室疾病的人得到 IBS (irritable bowel syndrome) 是提升的<sup>51</sup>，但兩者間是否擁有類似的病生理成因，目前還不得而知。就目前而言，憩室疾病是否會影響慢性症狀成未定論，尚需要更多的研究來證實。

## 診斷

憩室炎的臨床診斷上，除了上述所描述的症狀（腹痛、發燒等），亦可有許多實驗室檢查來予以佐證，目前在臨床上並無常規建議的檢查項目，但在 Longstreth 等人<sup>52</sup>對於 741 人的研究中發現，嚴重憩室炎相較於未診斷或是輕微憩室炎的病人，有較多的男性比例、較少僅有腹痛症狀、較多發燒及便秘狀況，在實驗數據上有較多 leucocytosis、neutrophilia、bandemia、triad of abdominal pain, fever and leucocytosis 等。然而上述所述之症狀與實驗室檢查多半為非專一性，需要更多的影像學檢查來幫助診斷，在統計上若無影像學介入，誤診的機率高達 34~67%<sup>53</sup>。影像學診斷可包含下列：

### 一、Plain Films

Plain Films 在腹痛的病人上應被充分應用，在統計上患有憩室炎的病人，可能有三到五成有異常表現，包含了 pneumoperitoneum、bowel dilatation（暗示腸阻塞）、soft tissue density（暗示 abscess）等<sup>54,55</sup>。

### 二、Contrast barium enema

Contrast barium enema 對於憩室炎診斷有相當程度的幫助，但由於憩室炎有腸破裂的風險，因此建議使用水溶性顯影劑，一般來說使用 single-contrast 即可，在臨床統計上 extensive diverticulosis、spasm、mucosal thickening or spiking、deformed sacs、abscess cavity、intramural sinus tract、fistula、顯影劑外漏等都暗示著憩室炎的診斷<sup>56,57</sup>，其 sensitivity 在 62 到 94% 左右<sup>58</sup>。

### 三、Computed tomography (CT)

隨著科技的進步，電腦斷層有高度的解像力，非侵入性的特質，有慢慢取代 barium enema 的趨勢，在早期研究<sup>59</sup>統計上 pericolic fat inflammation、diverticula、colonic wall thickness greater than 4 mm、abscess 等，都暗示著有憩室炎。同時研究<sup>60,61</sup>中也發現其俱有高達 93~98% 的 sensitivities，與 75~100% 的 specificities。另外，亦可借由電腦斷層分類憩室炎的嚴重度，對於併發症和 elective surgery 的處置有相當大的幫忙<sup>62,63</sup>（表一）。

### 四、Endoscopy

近年來隨著大腸鏡的推廣，有越來越多的憩室疾病藉由大腸鏡診斷出來，然而對於憩室炎的病人，大腸鏡僅建議小心使用於 uncomplicated diverticulitis，且檢查過程需避免過多的充氣，主要因為憩室炎所引起的 micorabscess，在充氣增加腸內壓力的過程，會有引發腸破裂的風險，一般建議於急性憩室炎後六周再予以進行。同時也建議憩室炎病患在症狀緩解後仍應進行大腸鏡檢 (American College of Gastroenterology guidelines)，予以排除其他疾病（尤其是惡性腫瘤）的可能性。在一 41,037 患有大腸癌病人的研究中發現，因憩室疾病住院的病人中，其患有大腸癌之 odds ratio 高達 25<sup>64</sup>。Azadeh 等人<sup>65</sup>針對 1034 憩室炎病人的研究也指出，憩室炎發病後六個月內做大腸鏡，診斷大腸惡性腫瘤的 odds ratio 達 23.35，建議若在電腦斷層上發現 wall thickness more than 6 mm、abscess、obstruction、lymph nodes 應儘早接受大腸鏡檢。

### 五、Ultrasonography and Magnetic Resonance Imaging

超音波在臨床上也屬於非侵入性檢查，可有效幫助診斷，若看到 bowel wall thickening、presence of diverticula or abscesses、hyperechogenicity of the bowel wall 等都暗示著有憩室炎，其 sensitivity 可達 84~98%，specificity 可達 80~93%<sup>66,67</sup>。同時亦可和婦科問題作鑑別診斷。

MRI 則因掃描速度較慢，且結構解像力較差，目前在臨床上則較少使用，或許在未來掃描速度與解像力改善後，可以有更多臨床幫助。

## 六、治療

憩室炎的治療包含了內科療法與手術治療兩方面，分別敘述如下：

### (一) 內科療法

1. 抗生素治療：2007 年 NEJM 的 review paper<sup>68</sup> 中發現，憩室炎的成因目前雖然還不明，但和細菌感染有密切關係，故建議使用 7 到 10 天的抗生素治療，而憩室炎的腸菌落培養檢查中，可以發現大多為混合 aerobic and anaerobic organisms，最常見的菌種為 *Escherichia coli*、*Streptococcus species*、*Bacteroides fragilis*<sup>69</sup>，故建議使用廣效性抗生素治療 (metronidazole or clindamycin 配合 aminoglycoside、monobactam，亦可單獨使用 beta-lactamase inhibitor combinations、2<sup>nd</sup> or 3<sup>rd</sup>-generation cephalosporin)。然而近年來，隨著統計數據的收集，抗生素的使用方法漸漸有些改變。首先，對於 uncomplicated diverticulitis 的研究發現，給予靜脈注射劑型相較於口服劑型並無特別的好處，同時服用口服劑型搭配門診追蹤治療是相當安全的<sup>70-75</sup>。其次，在使用時間的長短，Schug-Pass 等人<sup>76</sup> 發現，在適當的抗生素下，使用 4 天和 7 天的效果是類似的。第三，在一瑞典 623 人的 RCT 研究<sup>77</sup>，比較口服、針劑抗生素與無抗生素使用於 uncomplicated left-sided diverticulitis 中，發現對於住院日、症狀改善、復發率等，並無有意義的差別，因此建議抗生素應只使用於 complicated diverticulitis，其他研究<sup>78</sup> 也有相同的發現，事實上，在丹麥的 national guidelines<sup>79</sup> 中亦不建議對於 uncomplicated diverticulitis 病人使用抗生素 (grade A)，僅建議使用於合併有敗血症、懷孕與免疫抑制的病人 (grade C)，這可能和急性憩室炎中發炎比感染的比率來的大有關係<sup>80</sup>。是故，在處理這類的病人上，抗生素的使用或許可以趨於保守些。另外，近來多篇研究發現 Rifaximin (一種腸內難以吸收分解的抗生素) 為基底的藥物使用似乎對於慢性憩室炎症

狀與併發症有明顯的改善<sup>81</sup>。

2. Probiotics：Probiotics 的使用概念源於，憩室炎可能因為腸內道菌落組成改變，進而引發感染與疾病，導正菌落組成，或許可以藉由預防發炎反應，以及調節免疫機制而改善疾病，在 Tursi 等人<sup>82</sup> 的研究中，比較單獨使用 mesalazine、*Lactobacillus casei* 與兩者合併使用，一年的追蹤中，發現合併使用對於症狀有明顯改善且效果最好，在長期的追蹤研究中亦有類似結果<sup>83</sup>。在另一對於 83 病人的研究中也發現，Probiotics 可有效減少 abdominal pain、bloating、fever，但對於復發率改善則無效果<sup>84</sup>。

3. Anti-inflammatory Medication：憩室炎的症狀與併發症，被認為是由憩室組織發炎所引發的，臨床上許多研究也指出在慢性憩室炎中比較單獨使用抗生素與合併使用 mesalamine，合併使用者可更有效緩解症狀<sup>85</sup>，以及有較低的復發率<sup>86</sup>。其他早期的研究也有類似的證據<sup>87</sup>。目前亦有兩個大型研究 (PREVENT 1 and PREVENT 2 trials) 正在分析，mesalamine 對於憩室炎的長期影響。

4. Anticholinergic and antispasmodic agents：此類的藥物使用基礎在於緩解腸收縮，以緩解腸內壓力而改善症狀，在一小型的雙盲試驗中<sup>88</sup>，發現合併使用此類藥物可以改善腹痛、腹脹、排便障礙等問題，但和 IBS 間的關係卻難以釐清，因此還需待更多的研究證據來支持此類藥物的使用。

### (二) 外科療法

目前對於憩室炎的治療，還是以內科療法為主流，在 Dharmarajan 等人<sup>89</sup> 對 136 合併有 extraluminal air、fluid、and/or abscess 的憩室炎病人研究中，只有五人接受緊急手術，12 人因內科療法失敗需接受手術治療，Costi 等人<sup>90</sup> 的系列報告中也提到，大約只有 7% 的病人需接受手術治療，另外約有 18% 病人需要 percutaneous drainage。事實上目前手術適應症的共識為無法經內科療法控制的嚴重感染或是腹膜炎<sup>91</sup>。在現實的觀察中，則大約有 15~20% 急性憩室炎病人在住院中有接受手術治療<sup>92-94</sup>。

在統計上，complicated acute diverticulitis

(有 abscess or pneumoperitoneum 者) 病人比較常接受手術治療，他們也較具有腸破裂與併發症的風險，在後續的追蹤中也有較高的復發機會，另外若有發現腸破裂的徵兆也建議手術，因為其晚期併發症較多<sup>95,96</sup>。但亦有研究持不同的觀點，Gaertner<sup>97</sup> 與 Villa<sup>98</sup> 等人研究指出，藉由 percutaneously drainage 引流 abscess 後，其復發與併發症風險未有上升趨勢。對於慢性或是復發的憩室炎，則如前文所述目前不被常規建議接受手術治療。

在腹腔鏡使用的考量上，Sigma trial<sup>99,100</sup> 比較了 100 人接受腹腔鏡與剖腹術式的結果，接受腹腔鏡病人有較少的重大併發症、住院日與術後疼痛等，也有較高的生活品質評分。但因腹腔鏡術式較困難，亦有研究發現接受腹腔鏡後預後並無明顯變化<sup>101</sup>。對於選擇何種術式還是必須對個案整體考量後予以選擇。

在開刀的術式考量上，傳統的術式為先使用 Hartmann procedure (切除病灶腸段，將遠端腸段關閉留滯體內，近端腸段拉出體表做造口)，待急性病程過去後，再重新將腸接合。但由於要兩階段手術，目前 single operation (resection with primary anastomosis) 的使用漸漸變成主流，不過 primary anastomosis 需要患者先 colon preparation 來減少 infection、leakage 等併發症，通常較適用於 uncomplicated diverticulitis，而 Hartmann procedure 不需事先 colon preparation 故可適用於緊急手術，亦適用於 complicated diverticulitis 的治療。但近年來隨著技術的進步，primary anastomosis 亦被使用於急性期治療，系列的報告<sup>102-106</sup> 指出兩者間的短期預後類似。Oberkofler 等人<sup>107</sup> 對於 62 病人的研究中發現，兩個術式的死亡率與併發症並無統計上的差異，但在後續腸接合與重大病發症的比例上，primary anastomosis 俱有統計上的優勢。但因每個病人的併發位置和生理狀況都不相同，故在臨床上要使用何種術式，還需視每個病人狀況而予以分析設計。

## 憩室出血 (Diverticular bleeding)

除了上述的憩室炎以外，Diverticular bleeding 在臨床上亦為常見問題，同時也是紅黑

色血便的最常見原因，大約 3~5% 患有憩室的病人經歷了嚴重的出血<sup>108,109</sup>。在憩室出血的病人中，約 75% 會自動止血<sup>110</sup>，但再次出血的比率可達 22~38%，其中再出血者患有第三次出血的可能性則高達 50%。

在危險因子分析方面，具有高齡、高血壓、缺血性心臟病、肥胖、慢性腎臟病、糖尿病等動脈粥狀硬化相關疾病，則具有較高出血風險<sup>111,112</sup>，同時服用 NSAID 類消炎藥物與抗血小板藥物等也會增加出血風險<sup>113-115</sup>，而憩室出血的位置則多半在近端大腸 (Right colon)<sup>116-118</sup>。

Meyers 等人<sup>119</sup> 對於出血的血管分析，發現位於憩室內的血管具有 intimal thickening 和 medial thinning 現象，其會導致血管壁支撐力薄弱，而引發血管破裂出血，但 Diverticular bleeding 的確切原因目前則還不明。

在臨床症狀上，多以紅黑血便為主，但腹脹、腹絞痛或是腹瀉感亦有可能出現，若出血過多則可能會有昏厥、頭暈、氣喘等貧血症狀。理學檢查方面則可看到 poor skin turgor、少尿、皮膚乾燥等徵象，腹部檢查多無大異常，肛門指診可見紅黑色血便，鼻胃管沖洗可用於排除上腸胃道出血。實驗室檢查方面，因早期為全血流失，故血紅素在急性期可能不會下降，若有小球性貧血或是缺鐵性貧血，則要考慮慢性出血可能，另大腸憩室出血較不會有 Bun-Creatine 比值上升的情形<sup>120,121</sup>。

在臨床診斷與處置方面，首先需先給予輸液與輸血穩定生命徵象，若病人血液動力學穩定，則建議盡快 (12~48 小時內) 接受大腸鏡檢為首選，其可明確診斷出血位置<sup>122</sup>，並實行物理性止血 (包含 epinephrine injection、heater probe coagulation、bipolar coagulation、endoclips、fibrin sealant、band ligation 等)，以減少相關合併症，近期的研究則提醒，憩室出血位置若於升結腸，經 endoclips 止血後，較易產生頑固性出血<sup>123</sup>。若大腸鏡檢無法確認病灶，或血液動力學不穩定，則建議可使用血管攝影，出血量多於 0.5 mL/min 者大多可被診斷，同時血管栓塞術亦可直接治療，止血效果

可達 67~100%，但其俱有腸梗塞風險<sup>124-127</sup>。Nuclear scintigraphy 則可以診斷 0.1 mL/min 出血量之病灶<sup>128</sup>，具有高度的診斷力，但無法直接介入治療。對於使用電腦斷層尋找病灶，目前有相當多研究但其角色仍需待確定。另亦有研究指出使用高劑量 barium 灌腸<sup>129,130</sup>，對於止血具有相當療效，但其原因不明，可能與增加腸內壓而產生加壓止血效果，或與 barium 本身可能促進凝血相關。

若出血無法自行停止，或藉由內視鏡、血管攝影等方式止血，則必須借助手術的幫忙，在需要輸血的病人中，約有 18~25% 需要外科介入<sup>131,132</sup>。術後再出血的比率大約為 6~12%<sup>133,134</sup>。值得注意的是，若已知出血位置而進行 Segmental colectomy，其合併症發生率為 8.6%，若無法確定位置而進行 Subtotal colectomy，則合併症發生率可達 37%<sup>134</sup>。另 Blind segmental colectomy，現已不被建議使用。

## 結 論

在整個回顧中，可以發現以下幾個觀點值得我們注意：

- 一、高纖食物不再俱有保護效果
- 二、憩室病人食用種子類食物是安全的
- 三、肥胖與抽煙會增加憩室炎風險，高濃度維他命 D 則有降低風險效果
- 四、復發性憩室炎不建議接受預防性手術切除
- 五、憩室炎急性期過後，建議接受大腸鏡檢以排除惡性腫瘤的可能
- 六、對於 uncomplicated diverticulitis 的抗生素使用可以趨於保守
- 七、抗發炎藥物可以減少臨床症狀以及復發機率
- 八、益生菌的使用對於症狀改善有所幫忙
- 九、目前對於開刀術式的選擇還需因人而個別設計
- 十、對於憩室出血，應盡快確認出血位置以採取合適的處置

隨著越來越多的研究報告出爐，未來可能還有更多新的證據，但回歸臨床上病人的狀況

都是獨一無二的，每個病人的治療方針，還應按照個人狀況分析設計，才能擁有較好的預後。

## 附 記

本文作者並未接受任何來源之贊助，也無任何利益衝突。

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# Recent Advances in Colon Diverticular Disease

Nai-Hsuan Chien<sup>1</sup>, and Chia-Long Lee<sup>1,2,3</sup>

<sup>1</sup>*Division of Gastroenterology, Department of Internal medicine, Cathay General Hospital;*

<sup>2</sup>*Hsinchu Cathay Hospital;*

<sup>3</sup>*School of Medicine, College of Medicine, Taipei Medical University*

Diverticular disease is a popular and old problem. The incidence and importance also rise due to the aging and occidentalized population. We review recent studies and clinical data, and some concepts are different and updated. High fiber diet has no evidence in prevention. The seed would not induce the diverticulitis. The abdominal CT could give us more information for the severity classification. The usage of antibiotics could be more conservative in uncomplicated diverticulitis. The recurrent rate and severity are not as high as our estimation, so preventive operations for recurrence are not suggested any longer. Probiotics and anti-inflammatory medication have some benefit in the symptoms control. If the patients have abscess, pneumoperitoneum, or other perforation sign, the operations are more likely to perform due to the more late complication. The choices of laparoscope use or procedure method (Hartmann procedure or primary anastomosis) are still controversial and should depend on the patient condition. (J Intern Med Taiwan 2014; 25: 238-249)