



WORKSHOP Risultati del Programma Regionale di Screening Colorettale

**Aggiornamenti Protocollo Regionale
Sono indicati:**

Test emocoagulativi?

Profilassi antibiotica?

Arrigo Arrigoni

S.C.GASTROENTEROLOGIA 2



Torino, 19 ottobre 2011

COMPLICANZE EMORRAGICHE

Colonscopia o sigmoidoscopia

Biopsie

Polipectomia con ansa a freddo

Polipectomia

FATTORI “TECNICI” E “DEL PAZIENTE”

1) Emorragia precoce (< 12 h)

Fattori tecnici (scarsa preparazione, modalità di taglio e di corrente utilizzata e taglio accidentale di un polipo prima dell'applicazione della corrente.

Fattori del paziente (terapia anticoagulante, cirrosi, deficit coagulativi)

Caratteristiche del polipo (polipi superiori a 1 cm, morfologia del polipo ad es. grossi peduncoli o LST estesi, il rischio aumenta con le dimensioni, 9% per mm)

2) Emorragia tardiva (> 12 h, fino anche a 14 gg dopo, caduta escara)

Fattori tecnici (corrente di coagulo?)

Fattori del paziente (ripresa precoce anticoagulante, cirrosi, deficit coagulativi)

Dimensioni del polipo

N.B. In caso di anamnesi positiva per disturbi della coagulazione il paziente risulta essere a rischio di sanguinamento sia precoce che tardivo;



Risks of Colonoscopy and Polypectomy

Gregory G. Ginsberg, MD

Colonoscopy with polypectomy is widely accepted as the optimal means for screening and surveillance for colorectal cancer and for the management of pre-cancerous polyps. The procedure is generally safe and well tolerated. The major risks directly related to colonoscopy with polypectomy are bleeding, perforation, and post-polypectomy burn syndrome. This article details strategies to minimize the risk and enhance the management of complications associated with colonoscopic polypectomy.

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KEYWORDS colonoscopy, polypectomy, complications

MA QUANDO POSSIAMO TROVARE UNA COAGULAZIONE “ALTERATA”, NEL CONTESTO DELLO SCREENING?

- FARMACI ANTICOAGULANTI DICUMAROLICI
- CIRROSI CON PIASTRINOPENIA E/O DEFICIT DI PROTROMBINA
- EMOFILIA
- MALATTIA DI VON WILLEBRAND

IN SOGGETTI....

- DI ANNI 57 O PIU'
- VAGLIATI DAL CURANTE (PRIMO FILTRO)

CHE VENGONO SOTTOPOSTI A

SIGMOIDOSCOPIA

- Polipectomia polipi < 10 mm, a “freddo” fino a 5 mm
- Biopsie

POSSIBILE RACCOLTA ANAMNESI FAMILIARE/PATOLOGICA/FARMACOLOGICA PRIMA DELL'ESAME

- 1.Familiarita' per emorragie
- 2.Storia personale di emorragie, emofilia ecc.
- 3.Storia personale di cirrosi
- 4.Assunzione di dicumarolico (ma anche antiaggreganti come clopidogrel)

COLONSCOPIA INDOTTA DA FS (O DA FOBT)

- Operativa certa
- Polipi > 10 mm

COLONSCOPIA INDOTTA DA FOBT

- Operativa probabile
- Contatto per RACCOLTA ANAMNESI DIFFICOLTOSO

EVIDENZA CRITICA

.....La determinazione preliminare di parametri di coagulazione (PTT, PT, INR) non è di alcuna utilità clinica a meno che il paziente non presenti storia di sanguinamento, epatopatia o sia in terapia anticoagulante. Al basso valore predittivo si aggiunge l'alto tasso di falsi positivi (2,3%).

La presunta giustificazione allo screening della coagulazione sarebbe l'identificazione dei casi non diagnosticati di emofilia e malattia di von Willebrand

I TEST COAGULATIVI NON SONO DI ALCUNA UTILITA' SE NON NELLE SITUAZIONI PRECEDENTEMENTE EVIDENZIATE E RISCONTRABILI ALL'ANAMNESI

PT e PIASTRINE

CIRROSI, sospettabile clinicamente, di solito nota

PTT

EMOFILIA, a 57 anni quasi sempre già emersa. Comunque anamnesi di emorragie, facile sanguinamento. Probabilità di emofilia in adulti, senza storia familiare o precedenti di intervento 1:40.000

VON WILLEBRAND, allungamento del PT poco sensibile

Per contro.....

ELEVATI FALSI POSITIVI (ALLUNGAMENTI MINIMI DEL PTT)

CONCLUSIONI

RACCOLTA ANAMNESI IN OCCASIONE DELL'FS

RACCOLTA ANAMNESI MIRATA IN OCCASIONE DELLA
PRENOTAZIONE TELEFONICA DELLA COLONSCOPIA FOBT INDOTTA

SE ESCLUSA

- CIRROSI, EMOFILIA, VON WILLEBRAND
- PRECEDENTI DI SANGUINAMENTI E DIATESI EMORRAGICHE
- ASSUNZIONE DI ANTICOAGULANTI

**EVITARE L'ESECUZIONE SISTEMATICA DEI TEST
EMOCOAGULATIVI**

Durante ogni procedura endoscopica gastrointestinale sia diagnostica che terapeutica può avvenire una batteriemia conseguente a trauma diretto della mucosa o a contaminazione di spazi o tessuti sterili da parte di un accessorio endoscopico,

tab. 1: incidenza di batteriemia (1,2)	
Procedura	Batteriemia
EGDS (+/- biopsia)	0 - 8% (frequenza media 4.4%)
Colonscopia (+/- biopsia e polypectomia)	0 - 25 % (frequenza media 4.4%)
EUS - FNA	4.0 - 5.8%
Dilatazione / Protesi esofagee	12 - 54%
Sclerosi di varici esofagee	0 - 52% (frequenza media 14.6%)
Legatura di varici esofagee	1 - 25% (frequenza media 8.8%)
ERCP (VB non occlusa)	6.4%
ERCP (VB occlusa)	18%
Laserterapia esofagea	31 - 34%
Laserterapia colon	< 19%
Lavaggio denti	20 - 70%
Masticazione di cibo	5 - 51%
Uso di stuzzicadenti	20 - 40%

Data che la maggior parte degli individui si sottopone raramente ad endoscopie, la frequenza e rischio di una batteriemia legate all'endoscopia sono trascurabili confronto a quelli che si incontrano nelle comuni attività quotidiane

La batteriemia comporta un rischio di localizzazione e colonizzazione batterica a distanza (es. endocardite), è facilitata da determinate condizioni.

Pazienti ad alto rischio:

- Protesi valvolari
- Storia di endocardite
- Shunt sistemico-polmonari
- Cardiopatie congenite cianogene
- Protesi vascolari posizionate da meno di un anno
- Grave neutropenia (< 100)

Pazienti a rischio intermedio:

- Patologie valvolari acquisite
- altre cardiopatie congenite
- Cardiomiopatia ipertrofica
- Prolasso mitralico con rigurgito significativo
- Trapianto cardiaco
- Neutropenia moderata (100-500)

Pazienti a basso rischio:

- By pass aorto-coronarico
- Prolasso mitralico senza rigurgito
- Difetti settali, patent ductus
- Pace maker
- Defibrillatori
- Febbre reumatica senza disfunzione valvolare

SU QUESTE BASI PRATICATA PROFILASSI ANTIBIOTICA DELL'ENDOCARDITE

	Procedure ad alto rischio	Procedure a basso rischio
Pazienti ad alto rischio	raccomandata	opzionale
Pazienti a rischio intermedio	opzionale	non raccomandata
Pazienti a basso rischio	non raccomandata	non raccomandata

Pazienti ad alto rischio

Protesi valvolari
Storia di endocardite
Shunt sistemico-polmonari
Protesi vascolari posizionate da meno di un anno
Cardiopatie congenite cianogene

Pazienti a rischio intermedio

Altre cardiopatie congenite
Patologie valvolari acquisite
Cardiomiopatia ipertrofica
Prolasso mitralico con rigurgito significativo

Pazienti a basso rischio

By-pass aorto-coronarico
Difetti settali, patent ductus
Prolasso mitralico senza rigurgito
Pace-makers
Impianto di defibrillatori
Febbre reumatica senza disfunzione valvolare
Etc

Procedure ad alto rischio

Scleroterapia di varici esofagee
Dilatazione di stenosi
ERCP in presenza di ostruzione biliare

Procedure a basso rischio

Tutte le altre

Schemi raccomandati

Amoxicillina 2 gr per os 1 ora prima (bambini: 50 mg/Kg)

Oppure

Ampicillina 2 gr e.v. 30 minuti prima (bambini: 50 mg/Kg)

Pazienti allergici alla penicillina:

- Clindamicina 600 mg (bambini 20 mg/Kg) per os 1 ora prima
- Cefalexina o cefadroxil 2 grammi (bambini 50 mg/Kg) per os 1 ora prima
- Azitromicina o claritromicina 500 mg (bambini 15 mg/Kg) per os 1 ora prima
- Cefazolina 1 gr (bambini 25 mg/Kg) i.m. o e.v. 30 minuti prima
- Vancomicina 1 gr (bambini 10-20 mg/Kg) e.v. 30 minuti prima

Recentemente la Società Americana di Cardiologia (AHA) , così come le Società Scientifiche Cardiologiche francesi, tedesche e britanniche, hanno modificato le linee guida per la profilassi antibiotica dell'endocardite sulla base delle seguenti evidenze:

- 1) I casi di endocardite batterica associata a procedure endoscopiche gastrointestinali sono aneddotici;
- 2) mancano dati conclusivi sulla reale correlazione tra procedura endoscopica ed insorgenza di endocardite batterica;
- 3) mancano studi che dimostrino l'efficacia della profilassi antibiotica nel prevenire l'endocardite;
- 4) è noto il rischio, sia pur basso, di eventi avversi secondari all'assunzione di antibiotici, compresi l'anafilassi e l'infezione da *Clostridium difficile*, o di favorire la selezione di batteri resistenti quali lo *Staphylococcus aureus* meticillino-resistente (MRSA).

Secondo queste linee guida, fatte proprie dall'ASGE e dalla BSG, la profilassi antibiotica non è raccomandata per la prevenzione dell'endocardite nei pazienti con fattori di rischio cardiaci che si sottopongono ad una procedura endoscopia diagnostica o terapeutica.

Raccomandazioni

La profilassi antibiotica al solo fine di prevenire l'endocardite non è più raccomandata prima delle procedure endoscopiche.....



GUIDELINE



Antibiotic prophylaxis for GI endoscopy

This is one of a series of statements discussing the use of GI endoscopy in common clinical situations. The Standards of Practice Committee of the American Society for Gastrointestinal Endoscopy (ASGE) prepared this text. In preparing this guideline, a search of the medical literature was performed by using PubMed, supplemented by accessing the "related articles" feature of PubMed. Additional references were obtained from the bibliographies of the identified articles and from recommendations of expert consultants. When little or no data exist from well-designed prospective trials, emphasis is given to results from large series and reports from recognized experts. Guidelines for appropriate use of endoscopy are based on a critical review of the available data and expert consensus at the time the guidelines are drafted. Further controlled clinical studies may be needed to clarify aspects of this guideline. This guideline may be revised as necessary to account for changes in technology, new data, or other aspects of clinical practice. The recommendations were based on reviewed studies and were graded on the strength of the supporting evidence (Table 1).

This guideline is intended to be an educational device to provide information that may assist endoscopists in providing care to patients. This guideline is not a rule and should not be construed as establishing a legal standard of care or as encouraging, advocating, requiring, or discouraging any particular treatment. Clinical decisions in any particular case involve a complex analysis of the patient's condition and available courses of action. Therefore, clinical considerations may lead an endoscopist to take a course of action that varies from these guidelines.

BACKGROUND

Bacterial translocation of endogenous microbial flora into the bloodstream may occur during an endoscopy because of mucosal trauma related to the procedure. Endoscopy-related bacteremia carries a small risk of localization of infection in remote tissues (ie, infective endocarditis). An endoscopy may also result in local infections in which

a typically sterile space or tissue is breached and contaminated by an endoscopic accessory or by contrast injection. This guideline discusses infectious complications related to an endoscopy and makes recommendations for periprocedural antibiotic therapy.

BACTEREMIA ASSOCIATED WITH ENDOSCOPIC PROCEDURES

Bacteremia can occur after endoscopic procedures and has been advocated as a surrogate marker for infective endocarditis (IE) risk. However, clinically significant infections are extremely rare. Despite an estimated 14.2 million colonoscopies and 2.8 million flexible sigmoidoscopies, and perhaps as many upper endoscopies, performed in the United States each year,¹ only approximately 15 cases of IE have been reported, with a temporal association with an endoscopic procedure. There are no data that demonstrate a causal link between endoscopic procedures and IE. Similarly, there are no data that demonstrate that antibiotic prophylaxis before endoscopic procedures protects against IE.

High-risk procedures

The highest rates of bacteremia have been reported with esophageal dilation and sclerotherapy. In 3 prospective studies, the rate of bacteremia after esophageal bougienage was demonstrated to be 12% to 22%.²⁻⁴ The cultured organisms are usually commensal to the mouth. In 1 study, *Streptococcus viridans* was the organism isolated in 79% of cases.² Bacteremia may be more frequent with the dilation of malignant strictures than with benign strictures.³ Bacteremia may also be more frequent with the passage of multiple dilators rather than with a single dilation.⁵

Estimates of bacteremia associated with variceal sclerotherapy have ranged from 0% to 52%, with a mean of 14.6%.⁵⁻⁸ Endoscopic variceal ligation, which has largely supplanted sclerotherapy, has been associated with bacteremia rates of 1% to 25%, with a mean rate of 8.8%.⁹⁻¹⁴

Whereas, an ERCP in patients with nonobstructed bile ducts has been associated with a relatively low rate of bacteremia, of 6.4%, it rises to 18% in the setting of obstruction of the biliary tree with stones or a tumor.¹⁵

Low-risk procedures

A gastroscopy, with or without a biopsy, is associated with rates of bacteremia that range from 0% to 8%, with

TABLE 2. Antibiotic prophylaxis for endoscopic procedures

Patient condition	Procedure contemplated	Goal of prophylaxis	Periprocedural antibiotic prophylaxis	Grade of recommendation: comments
All cardiac conditions	Any endoscopic procedure	Prevention of infective endocarditis	Not indicated	1C+
Bile-duct obstruction in the absence of cholangitis	ERCP with complete drainage	Prevention of cholangitis	Not recommended	1C
Bile-duct obstruction in absence of cholangitis	ERCP with anticipated incomplete drainage (eg, PSC, hilar strictures)	Prevention of cholangitis	Recommended; continue antibiotics after the procedure	2C
Sterile pancreatic fluid collection (eg, pseudocyst, necrosis), which communicates with pancreatic duct	ERCP	Prevention of cyst infection	Recommended	3
Sterile pancreatic fluid collection	Transmural drainage	Prevention of cyst infection	Recommended	3
Solid lesion along upper-GI tract	EUS-FNA	Prevention of local infection	Not recommended	1C; low rates of bacteremia and local infection
Solid lesion along lower-GI tract	EUS-FNA	Prevention of local infection	Insufficient data to make firm recommendation	Endoscopists may choose on a case by case basis; a single study indicates a low risk of infection
Cystic lesions along GI tract (including mediastinum)	EUS-FNA	Prevention of cyst infection	Recommended	1C
All patients	Percutaneous endoscopic feeding tube placement	Prevention of peristomal infection	Recommended	1A; decreases risk of soft-tissue infection
Cirrhosis with acute GI bleeding	Required for all patients, regardless of endoscopic procedures	Prevention of infectious complications and reduction of mortality	Upon admission	1B; risk for bacterial infection associated with cirrhosis and GI bleeding is well established
Synthetic vascular graft and other nonvalvular cardiovascular devices	Any endoscopic procedure	Prevention of graft and device infection	Not recommended	1C+; no reported cases of infection associated with endoscopy
Prosthetic joints	Any endoscopic procedure	Prevention of septic arthritis	Not recommended	1C+; very low risk of infection

Raccomandazioni

La profilassi antibiotica non è più raccomandata per la prevenzione dell'endocardite infettiva in pazienti con fattori di rischio cardiaci che si sottopongono a procedure endoscopiche.

Questa conclusione si basa su 3 considerazioni principali:

- La rarità dell'endocardite infettiva come complicanza dell'endoscopia e l'assenza di una crescita esponenziale con il diffondersi dell'endoscopia
- L'impossibilità in molti casi di dimostrare un nesso causale tra endocardite e precedente procedura endoscopica.
- Il rischio associato con la somministrazione di antibiotici, in termini di allergia, resistenze e infezione da *Clostridium difficile*

Antibiotic prophylaxis in gastrointestinal endoscopy

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► Competing interests:

Declared (the declaration can be viewed on the Gut website at <http://www.gut.bmj.com/> supplemental).

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1. INTRODUCTION

Bacteraemia is common following some forms of gastrointestinal endoscopic therapy, such as dilatation or injection sclerotherapy, and can occur with diagnostic endoscopy alone. Fortunately complications resulting from dissemination of endogenous bacteria are uncommon, and infective endocarditis is an extremely rare complication. Furthermore, for most diagnostic and therapeutic procedures there is scant evidence that antibiotic prophylaxis can reduce the incidence of infective complications.

The area that has attracted the most controversy in recent years has been the use of antibiotics to prevent infective endocarditis. The recommendations by the American Heart Association (AHA)¹ have traditionally guided the advice of the national bodies representing endoscopic practice,²⁻⁵ including the British Society of Gastroenterology (BSG).⁶ The traditional guidance has been that patients at high risk of endocarditis, such as those with a prosthetic (ie, tissue or mechanical) valve and/or a past history of endocarditis should receive antibiotics for all endoscopic procedures. More recently the European Society of Cardiology recommended antibiotic prophylaxis to cover therapeutic endoscopy in patients with acquired valvular heart disease,⁵ and the British Cardiovascular Society went even further, advising antibiotic prophylaxis for patients at moderate risk of endocarditis undergoing any endoscopic procedure.⁷

The Endoscopy Committee of the BSG recognised the need for consensus on this issue, and convened a Working Party in the spring of 2006. The membership, comprised doctors with a special interest in gastroenterology, gastroenterologists, cardiologists and microbiologists. The gastroenterologists and microbiologists from this Working Party also took the opportunity to review the evidence underpinning the use of antibiotic prophylaxis in other areas of endoscopic practice, in particular endoscopic retrograde cholangiopancreatography (ERCP) and percutaneous endoscopic gastrostomy (PEG). In view of new guidance from the AHA, and from the National Institute for Health and Clinical Excellence (NICE), the Working Party reconvened in 2008 to reconsider, in particular, the issue of prophylaxis against infective endocarditis.

2. REMIT

2.1 Aim

These guidelines aim to help clinicians in deciding which patients undergoing gastrointestinal endoscopy should receive antibiotic prophylaxis.

2.2 Development

The BSG first published guidelines on the use of prophylactic antibiotics in 1996, and these were revised by Professor Mike Bramble in 2001.⁴ The 2006 BSG Working Party was chaired by Dr Robin Teague, and, in addition to members of the Endoscopy Committee, incorporated representation from the BCS and the British Society for Antimicrobial Chemotherapy (BSAC). The latter professional society was simultaneously in the process of reviewing its guidelines on antibiotic prophylaxis. Dr Miles Allison researched the current literature using PubMed and UltraMED software (the latter includes Medline), prepared the briefing documentation and, after the Working Party met, set about revising the previous version of the guidelines and preparing the first draft of the current guidelines.

Further changes have been made in the light of new guidelines from the AHA,⁸ the American Society for Gastrointestinal Endoscopy (ASGE),⁹ a clinical guideline from NICE^{10,11} and in response to comments from members of BSG Council and Endoscopy Committees, and six international referees who undertook peer review of the 2007 submission. A final conference comprising the six authors of this guideline took place in June 2008.

The guidelines conform to the North of England Evidence based Guidelines Development Project. The grading of each recommendation is dependent on the category of evidence supporting it. Recommendations based on the level of evidence are presented and graded as:

- A: requires at least one randomised controlled trial of good quality addressing the topic of the recommendation (evidence categories Ia and Ib);
- B: requires the availability of clinical studies without randomisation on the topic of the recommendation (evidence categories IIa, IIb and III);
- C: requires evidence from expert committee reports or opinions or clinical experience of respected authorities in the absence of directly applicable clinical studies of good quality (evidence category IV).

2.3 Scheduled review

The content and evidence base for these guidelines should be reviewed within 5 years of publication.

3. EXECUTIVE SUMMARY

3.1 Antibiotic prophylaxis is no longer recommended for the prevention of infective endocarditis in patients with cardiac risk factors who undergo

Potenziali conseguenze del non praticare più la profilassi

Sino ad ora la profilassi nei soggetti a rischio è stata praticata e non si può escludere che in qualche paziente abbia prevenuto l'endocardite.

E' possibile quindi che in futuro si assista ad un aumento dei casi di endocardite dopo pratiche endoscopiche.

La possibilità di un'endocardite deve essere considerata nei pazienti che manifestano sintomi e segni di infezione nelle settimane seguenti l'endoscopia. Tali pazienti devono essere prontamente indagati e trattati.

Box 1 Clinical features of infective endocarditis^a

Systemic features: intermittent pyrexia, sweats, chills, rigors, anorexia, weight loss, arthralgia and fatigue. Systemic symptoms may be acute or insidious in onset.

Cardiac manifestations: new or worsening cardiac murmurs—typically due to valvular regurgitation; or the development of cardiac failure.

Extracardiac manifestations: embolic as well as vasculitic phenomena. All major vessels may be the recipient of infected emboli from valve vegetations. Renal, splenic and neurological complications may be particularly serious.

Attenzioni particolari

Nei pazienti avvezzi a praticare la profilassi da molti anni per ogni procedura invasiva la decisione deve essere concordata. E' prevedibile che la maggior parte, informata, aderisca alle nuove linee guida ma è da accettare che alcuni pazienti decidano di praticare la profilassi.

CONCLUSIONI

NELLA PRATICA DELLO SCREENING DEL CANCRO COLORETTALE

LA PROFILASSI ANTIBIOTICA DELL'ENDOCARDITE NON E'
INDICATA.....

DISCUTERE TALE LINEA GUIDA CON IL PAZIENTE ED
EVENTUALMENTE ADATTARE LA CONDOTTA

MONITORARE I SINTOMI CHE POSSONO INSORGERE DOPO
L'ENDOSCOPIA