

SWESEMs utbildningsutskott

Rubrik

Epistaxis

2015-10-15

Introduktion

I cirka 90% av fall uppstår blödningen från locus Kiesselbachi, vilket resulterar i en främre näsblödning. Bakre näsblödningar uppstår oftast från den posterolaterala grenen av arteria sphenopalatina. Bakre näsblödningar kan orsaka betydande blodförlust, särskilt hos patienter som står på antikoagulantia.

Akutläkare förväntas kunna identifiera blödningsskällan och stoppa blödningen, vid behov med hjälp av främre +/- bakre nästamponad. Utredning för bakomliggande orsaker till blödningen, såsom cancer, förväntas inte.

Vid specialisttentamen

Vid specialisttentamen förväntas läkaren kunna demonstrera den initiala handläggningen av en patient med ihållande näsblödning. I färdigheten ingår främre rhinoskopi, applicering av lokalbedövning och vasokonstringerande läkemedel, anläggning av främre tamponad med gasväv och bakre tamponad med Foleykateter.

Indikation

- Ihållande epistaxis

Kontraindikation

- Massiv ansiktstrauma med potentiell skullbasfraktur¹

1-Förbereder patienten

- Kontrollerar vitalparametrar. Ortostatism? Överväger intravenös vätskebehandling²
- Förser patienten med förkläde och kräkpåse³
- Vid pågående blödning, ser till att patienten snyter sig och därefter kniper om näsan i 10-15 minuter⁴
- Överväger systemisk sedering / smärtstillning⁵
- Kontrollerar PK-INR om patienten står på warfarin⁶

2-Förbereder utrustning

- Tar på egen skyddsutrustning: mask med visir, förkläde, handskar
- Nässpekulum, pincett eller nästång
- Ljuskälla⁷
- Sug
- Lokalbedövning (t ex lidokain) och vasokonstringerande läkemedel (t ex nafazolin)
- Utrustning för etsning, t ex silvernitratt pinnar och/eller diatermi
- Utrustning för främre tamponad, t ex gasväv, Meroceel®, Rapid Rhino®
- Utrustning för bakre tamponad, t ex Foleykateter 10-14 F eller Epistaxiskateter®

3-Procedur

Identifierar blödningskälla⁸:

- Ber patienten snyta sig för att få bort blod och koagel⁹
- Sätter patienten upprätt i "sniffing position" med näshålans golv i planläge¹⁰
- Applicerar lokalbedövning +/- vasokonstringerande läkemedel (t ex lidokain-nafazolin) med bomullstuss; vid riklig blödning införs gasväv indränkt i lokalbedövning och vasokonstringerande läkemedel och patienten ombeds knipa om näsan¹¹
- Utför främre rhinoskopi med nässpekulum¹², sug vid behov¹³

Vid avstannad främre näsblödning:

- Inspekterar locus Kiesselbachi och etsar/bränner vid fynd av misstänkt kärl¹⁵

Vid ihållande främre näsblödning eller blödning av oklar källa:

- Packar näshålan¹⁶, exempelvis med:
 - Gasväv fuktad med Cyklokapron®-injektionsvätska alternativt Terracortril®-salva
 - Merocel® fuktad med Terracortril®-salva, på plats indränkt med NaCl
 - Rapid Rhino®: blötlägg i sterilt vatten i 30 sek, införs och fylls med luft upp till 25 ml

Vid misstänkt bakre näsblödning eller när främre tamponad inte är tillräcklig för hemostas¹⁷:

- För in Foley- Epistaxiskatetern utmed blödande näshålas golv tills den är synlig i orofarynx¹⁸
- Fyller (bakre) kuffen partiellt (5-7 ml) och retraherar tills den tar emot bakre choanae¹⁹
- Fyller kuffen helt (ytterligare 5 ml)²⁰
- Genomför främre tamponad med gasväv eller fyller främre kuffen av Epistaxiskatetern²¹
- Fixerar katetern med lätt drag, med en klämma om katetern²²
- Polstrar mellan klämma och näsa (förebygger tryckskada)²³

4-Kontroller/fortsatt vård

- Observerar i 10 min; vid fortsatt blödning trots bakre & främre tamponad kontaktas ÖNH-jouren²⁴
- Läger in patienter med bakre nästamponad för slutenvård²⁵
- Överväger systemisk antibiotika, särskilt hos patienter med ökad risk för infektion²⁶
- Warfarin behöver inte seponeras om PK är terapeutisk²⁷
- Undvik ASA och övriga NSAID i 4 dagar²⁸
- Packning tas bort efter 2-3 dagar²⁹

Anteckningar

1-Ansiktstrauma

"Massive facial trauma with the possibility of a basilar skull fracture would preclude the use of an intranasal balloon or packing because it may travel into the skull cavity." (Riviello 2013)

2-Hemodynamik

"In preparation for any procedure to treat epistaxis, evaluate the patient's hemodynamic status by assessing vital signs and orthostatic symptoms and by quantifying the amount of blood lost. If the patient is symptomatic in any of these areas or if the blood loss is deemed significant, consider starting a large-bore intravenous line for administration of fluid boluses." (Riviello 2013)

"Patients initially should have their hemodynamic status evaluated, with resuscitation and laboratory studies performed as needed based on the possible causes" (Pfaff 2013)

"It is important to assess the vital signs, mental status, and airway of any patient with significant bleeding, looking for signs of airway compromise or hypovolemic shock. This assessment is particularly important in the elderly and those with severe systemic disease." (Alter 2015)

3-Förkläde och kräkpåse

"Drape the patient with a gown to protect clothing from the bleeding." (Riviello 2013)

"Have the patient hold an emesis basin to collect any continued bleeding and as a precaution to emesis of swallowed blood." (Riviello 2013)

"Use an emesis basin to catch blood and expectorated clots. Encourage the patient to spit posterior pharyngeal blood into the basin as this will reduce the risk of emesis and aspiration." (Alter 2015)

4-Snyta sig och knipa om näsan

"If the nose is actively bleeding, the patient should clear clots by blowing the nose then apply bilateral pressure on the nasal septum by compressing the cartilaginous part of the nose for 10 to 15 minutes." (Pfaff 2013)

"Properly instructed patients may achieve hemostasis unassisted while the evaluation gets underway. The following approach may be helpful:

- Patient blows their nose to remove blood and clots
 - Clinician sprays the nares with oxymetazoline
 - Patient pinches the alae tightly against the septum and holds continuously for 10 minutes"
- (Alter 2015)

"the patient must exert pressure properly by grasping the alae distally and pinching them tightly against the septum such that the mucosal surfaces are tightly apposed. The patient should maintain this position continuously for 10 to 15 minutes without releasing pressure to see if the bleeding has stopped." (Alter 2015)

5-Överväger systemic sedering / smärtstillning

"Judicious use of parenteral sedation or narcotic analgesia is well supported to make the entire interaction more palatable to the patient and ultimately more successful." (Riviello 2013)

"Elevated blood pressure is usually a result of stress and anxiety and resolves with treatment. Hypertension has never been shown to cause epistaxis, although it can worsen the bleeding when present. Sedation with benzodiazepines or narcotics may help these patients." (Pfaff 2013)

"The anxious patient may be given a small parenteral dose of an anxiolytic medication, such as lorazepam." (Alter 2015)

6-Kontrollerar PK-INR

"Although an evaluation of coagulation parameters (prothrombin time, INR, platelet count) is not standard for patients with epistaxis, these studies should be ordered routinely for anticoagulated patients." (Riviello 2013)

"A prothrombin time (PT) with international normalized ratio (INR) is NOT indicated as a routine test, but should be ordered for the anticoagulated patient" (Alter 2015)

7-Ljuskälla

"Good lighting is essential, preferably with a headlamp or mirror." (Alter 2015)

8-Identifierar blödningskälla

"The key to successful management is identifying the site of nasal bleeding and whether it is anterior or posterior." (Pfaff 2013)

9-Ber patienten snyta sig

"Ask the patient to blow his nose to remove all blood and clots from the nasal passage." (Riviello 2013)

10-Positionering

"Ask the patient to sit upright in the sniffing position with the neck flexed and the head extended. . . . The base of the nose should remain parallel to the floor." (Riviello 2013)

"The patient must have the floor of the nose parallel to the floor. If the head is tilted, only the anterior and upper aspect of the nares can be visualized." (Pfaff 2013)

"Ask the patient to look directly ahead and attempt the sniffing position. Patients often try to tilt the head back to facilitate a nasal examination, but the nasopharynx lies in the anteroposterior plane and extension of the neck will obscure most of the cavity from view" (Alter 2015)

11-Lokal bedövning + vasokonstriktion

"The nasal cavity should be anesthetized prior to performing a detailed examination, which otherwise is uncomfortable. Adequate anesthesia can often be achieved with cotton swabs

soaked in an anesthetic and vasoconstrictive agent. Drugs commonly used for this purpose include 2 percent lidocaine, lidocaine with epinephrine, and 4 percent cocaine." (Alter 2015)

"The selected medication may be applied using two saturated cotton swabs, one placed directly posteriorly and another posterosuperiorly, or with saturated cotton pledgets hand rolled from cotton wool and placed in the nose with bayonet forceps. Oxymetazoline nasal preparation, although it has no anesthetic properties, can provide vasoconstriction. It is administered as two sprays. Oxymetazoline is readily available, convenient, and inexpensive." (Alter 2015)

"Persistent bleeding should be controlled with pledgets soaked in cocaine, lidocaine-epinephrine, or phenylephrine (Neo-Synephrine) to promote vasoconstriction and anesthesia. One ED study found that 65% of epistaxis patients had bleeding resolve with simple administration of oxymetazoline spray." (Pfaff 2013)

12-Rhinoskopi

"The nasal speculum should be opened in an upper-lower direction rather than side to side in the nares." (Pfaff 2013)

"An adequate examination for the source of bleeding requires use of a nasal speculum; an otoscope speculum is significantly less effective. When inserted, the nasal speculum is oriented so one blade moves superiorly and the other moves inferiorly. Further techniques to optimize use of the nasal speculum are based upon anecdote. The clinician can stabilize the speculum's position by placing his or her index finger on the bridge of the patient's nose. Alternatively, the clinician can use the index finger to press the nasal alae against the superior blade of the speculum, once it is inserted. This allows only the lower blade to move and may reduce patient discomfort." (Alter 2015)

13-Sug vid behov

"Gently suction the nasal cavity from front to back along the nasal septum and then laterally." (Riviello 2013)

14-Locus Kiesselbachi

"Inspect the area of Kiesselbach's plexus first since the majority of bleeds originate here (figure 1). Look closely for bleeding, ulceration, or erosion. It is sometimes helpful to displace coagulum gently with a cotton swab to identify a bleeding source. Also inspect the nasal vestibule, septum, and turbinates for sources of bleeding." (Alter 2015)

15-Etsning

"After having identified the site of bleeding in anterior epistaxis, the clinician has several treatment options. Application of silver nitrate chemically cauterizes the area, though it often is unsuccessful if there is active bleeding." (Pfaff 2013)

"If this is the initial bleeding and hemostasis is achieved, no packing is necessary. If it is recurrent bleeding within 72 hours of another or if cautery does not provide hemostasis, pack the anterior cavity." (Riviello 2013)

"If an anterior bleeding source is visualized, first-line treatment consists of chemical or electrical cautery. Chemical cautery is usually performed with silver nitrate sticks" (Alter 2015)

16-Packning

"If bleeding persists, anterior tamponade with a commercially available nasal tampon or balloon or a formal anterior nasal pack may be necessary." (Pfaff 2013)

"Use of anterior packs in epistaxis that is refractory to pressure and vasoconstrictors has been found to stop bleeding in 60 to 80% of cases." (Pfaff 2013)

"Sometimes minor anterior nosebleeds resolve without intervention prior to clinical evaluation or with the initial attempt at tamponade described above. If no anterior source is evident and bleeding has stopped, the nose should be packed only if bleeding recurs rapidly. It is reasonable to observe the patient for approximately 30 minutes for recurrent bleeding. Such patients should be discharged with antibiotic ointment to coat the mucosa, applied with a fingertip or cotton swab three times daily for three days. The natural history of nosebleeds that resolve spontaneously is not well described. Among younger patients, it appears that rebleeding rates are relatively low (approximately one in three or four cases). Given the discomfort of packing and the effectiveness of conservative measures in most cases, it is reasonable for patients without recurrence to forego packing." (Alter 2015)

17-Posterior näsblödning

"It can sometimes be difficult to determine the source of epistaxis. Neither the volume nor the rate of bleeding is helpful; anterior bleeding can be brisk. However, minor bleeding is unlikely to originate posteriorly. While pinching the alae stops many but not all anterior bleeds, many posterior bleeds stop spontaneously making interpretation difficult. Perhaps the best way to determine the bleeding source in difficult cases is to place bilateral anterior nasal packing and examine the patient. Brisk bleeding despite proper packing strongly suggests a posterior source." (Alter 2015)

"Posterior epistaxis is suggested when posterior bleeding occurs with a properly placed anterior nasal pack." (Pfaff 2013)

"If no bleeding source is found anteriorly and the patient continues to hemorrhage down the posterior aspect of the pharynx, the patient most likely has a posterior source of epistaxis. Posterior epistaxis may respond to topical vasoconstrictors. However, anterior nasal packing will not provide hemostasis for posterior bleeding because it will not cover the source of the bleeding. A posterior pack directly compresses the sphenopalatine artery and prevents the passage of blood or anterior packing into the nasopharynx." (Riviello 2013)

"If bilateral anterior packing fails to produce hemostasis, the odds of a posterior source increase greatly." (Alter 2015)

18-För in katetern

"Insert a 12-Fr Foley catheter through the naris and into the posterior pharynx. Look into the mouth to confirm that the catheter is properly positioned." (Riviello 2013)

19-Fyller kuffen partiellt och dra

"Inflate the balloon halfway with about 5 to 7 mL of normal saline or water. Slowly pull the Foley catheter into the posterior part of the nasopharynx and secure it against the posterior aspect of the middle turbinate." (Riviello 2013)

"A standard Foley catheter may be inserted into the nasopharynx, partially inflated, and then pulled anteriorly, creating pressure posteriorly. A small amount of fluid can be added to the balloon, but caution should be exercised to avoid pressure necrosis. It is recommended that plain water rather than saline be used because saline can crystallize and cause problems with balloon deflation later." (Pfaff 2013)

20-Fyller kuffen helt

"Finish inflating the balloon with another 5 to 7 mL of normal saline or water. If pain or inferior displacement of the soft palate occurs, deflate the balloon until the pain resolves." (Riviello 2013)

21-Främre packning

"While maintaining constant gentle anterior tension on the Foley catheter, place anterior nasal packing of layered petrolatum gauze." (Riviello 2013)

"Pack the opposite nasal cavity to counteract septal deviation." (Riviello 2013)

"Many practitioners still pack the anterior nose at this point because, without perfect apposition, some blood will pool anteriorly and exit the naris. Furthermore, some epistaxis episodes involve both anterior and posterior sources, especially in the setting of a coagulopathy or hereditary hemorrhagic telangiectasia. Be sure to maintain gentle traction on the Foley catheter while placing the anterior packing to avoid dislodgement of the former." (Alter 2015)

22-Klämma

"secure it [the catheter] with a nasogastric tube clamp or umbilical clamp." (Riviello 2013)

23-Polstrar

"Be careful to not exert undue pressure on the nasal alae to avoid causing necrosis." (Riviello 2013)

24-Observation

"Observe for 10 minutes after anterior packing to identify continued bleeding either anteriorly from the naris or running down the posterior aspect of the pharynx." (Riviello 2013)

"If packing does not provide successful control, ENT consultation is necessary. Definitive care may require internal maxillary artery ligation or embolization with Gelfoam or posterior endoscopic cautery." (Pfaff 2013)

"ENT consultation may be required for posterior nosebleeds that do not respond to the posterior packing techniques." (Riviello 2013)

25-Inläggning vid bakre näsblödning

"Patients with posterior nasal packs are generally admitted to the hospital and may require sedation and supplemental oxygen. The partial pressure of oxygen (Po₂) may decrease 10 mm Hg, and partial pressure of carbon dioxide (Pco₂) may increase 10 mm Hg after posterior packing. This is thought to be secondary to a postulated nasopulmonary reflex. Dysrhythmias, bradycardia, myocardial infarction, stroke, apnea, and aspiration also have been reported after posterior nasal packing." (Pfaff 2013)

"Observe patients with significant cardiopulmonary disease and posterior nasal packs in a monitored setting." (Riviello 2013)

"Most patients with a posterior pack, especially the elderly and those with pulmonary and cardiovascular diseases, should be admitted to the hospital for sedation and monitoring. This recommendation was common for formal posterior packs, but the ease and safety of balloon devices now allow selected patients to be treated as outpatients despite the presence of posterior packing." (Riviello 2013)

"Patients with posterior bleeds need posterior packing and probably hospitalization." (Alter 2015)

"Most patients with a suspected posterior source of bleeding require hospitalization in a bed with cardiac monitoring. Hospital admission may also be needed for patients with anterior packing who cannot be reasonably expected to return for prompt follow-up or who have serious comorbidities or concerning symptoms." (Alter 2015)

26-Antibiotika

"despite the lack of proven efficacy, many ENT specialists prefer to provide prophylaxis against TSS and antibiotics are commonly prescribed in patients with nasal packing for the duration of the packing. We prefer to avoid giving antibiotics and believe they should not be given routinely for prophylaxis against infection in patients with anterior nasal packing. The decision to prescribe antibiotics is appropriately individualized to the patient. It may be reasonable to treat patients at greater risk of infection, such as those with diabetes, advanced age, or immunosuppression. If prescribed, an antibiotic with staphylococcal coverage should be selected, such as amoxicillinclavulanate or a second-generation cephalosporin" (Alter 2015)

27-Antikoagulantia

"It is reasonable to continue warfarin when hemostasis is achieved and the international normalized ratio (INR) is in the intended therapeutic range." (Riviello 2013)

"Patients who are in the therapeutic INR range for their specific indication and in whom hemostasis is achieved may be safely maintained on their warfarin regimen." (Alter 2015)

28-NSAID

"Do not administer aspirin or nonsteroidal antiinflammatory drugs for 4 days after epistaxis." (Riviello 2013)

"Patients are counseled to avoid closed-mouth sneezing, nose picking, coughing, nose blowing, and aspirin." (Pfaff 2013)

29-Borttagning av tamponad

"When placed, anterior packs should be left in place for about 48 to 72 hours." (Pfaff 2013)

"If vital signs and respiratory function remain normal after [anterior]packing, the patient may be safely referred for specialist follow-up in 24 to 48 hours, with advice to present to an emergency department sooner if bleeding recurs." (Alter 2015)

"Specialty referral may not be necessary for healthy patients with stable vital signs and uncomplicated bleeding from a clearly identified source that resolves with simple cautery or one-time packing. Such patients should be reassessed when the packing is removed at 48 hours. Referral to an otolaryngologist is warranted in patients who do not meet ALL of these criteria, or about whom the clinician has questions or concerns." (Alter 2015)

"The [posterior] packs are left in for 2 to 5 days to minimize rebleeding and to avoid tissue necrosis associated with prolonged placement." (Pfaff 2013)

"Most posterior packs are left in place for 72 to 96 hours. The risk for necrosis increases with the duration of the packing, so all packing should be removed in 3 to 5 days." (Riviello 2013)

Referenser

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