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Recurrent Epistaxis in Adults: A Diagnostic Checklist for Identifying Systemic Causes and Assessing Consequences

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Abstract

Recurrent epistaxis in adults affects 5–8% of the population, yet its causes often remain unrecognized, and patients receive only local treatment for years without a proper systemic work-up. This review aims to summarize current evidence on the etiology, diagnosis, and consequences of recurrent epistaxis and to propose a practical diagnostic algorithm for primary care physicians. A narrative review of the literature was conducted using PubMed, Scopus, and E-Library databases over the last 15 years, focusing on systemic causes, diagnostic algorithms, and psychosocial outcomes. In 15-20% of adults with recurrent epistaxis, previously undiagnosed systemic disorders are identified, including hereditary hemorrhagic telangiectasia (HHT), von Willebrand disease, thrombocytopenias, chronic liver diseases, vasculitides, or iatrogenic coagulopathies. Key red flags include telangiectasias on the skin and mucous membranes, a family history of bleeding diatheses, bleeding from other sites, use of anticoagulants or antiplatelets, and systemic symptoms (arthralgias, renal or pulmonary involvement). Minimum laboratory work-up comprises a complete blood count with platelets, coagulation tests, and liver function tests; when indicated, von Willebrand factor assays, genetic testing for HHT, and vasculitis serology should be performed. Chronic post-hemorrhagic anemia develops in 40–55% of patients, while psychosocial disturbances (anticipatory anxiety, social isolation, occupational impairment) are found in over 60% of patients but are rarely addressed. Recurrent epistaxis should be regarded as a potential marker of systemic disease. The proposed diagnostic algorithm and differential diagnosis table can serve as practical tools for early detection of treatable conditions and for improving patients' quality of life.

Keywords: Recurrent epistaxis, Hereditary hemorrhagic telangiectasia, von Willebrand disease, Iron deficiency anemia, Diagnostic algorithm, Quality of life

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Introduction

Recurrent epistaxis (nosebleeds) in adults is a common reason for visiting otorhinolaryngologists, general practitioners, and emergency departments (Schmidtman *et al*., 2022; Hadar *et al*., 2026). According to epidemiological studies, up to 60% of adults experience at least one nosebleed in their lifetime. However, the recurrent form – defined as three or more episodes per month or repeated bleeding over more than three months – occurs in 5–8% of adults (Singh *et al*., 2023; Dispenza *et al*., 2024). In most cases, an acute episode is successfully managed with local methods (finger compression, anterior packing, cauterization), and patients do not receive a systemic work up (Pulpă *et al*., 2025). Nevertheless, the recurrent nature of bleeding can be the first and only manifestation of serious systemic diseases. These include hereditary hemorrhagic telangiectasia (Osler–Weber–Rendu disease), von Willebrand disease, thrombocytopenias, chronic liver diseases with coagulopathy, vasculitides, as well as iatrogenic hemostatic disorders associated with anticoagulant and antiplatelet use (Lynch *et al*., 2024; Du *et al*., 2025).

Despite the clinical significance of this problem, underdiagnosis of systemic causes of recurrent epistaxis persists in real world practice. Physicians often limit themselves to stating "weak vessels," prescribing moisturizers, and performing repeated cauterizations. Meanwhile, the patient continues to suffer from frequent episodes, chronic post hemorrhagic anemia, and significant psycho emotional discomfort for years (Benaim *et al*.,

2025; McDonald *et al*., 2026). The lack of a unified diagnostic algorithm and clear criteria for referral to advanced testing leads to delayed diagnosis of conditions such as hereditary hemorrhagic telangiectasia. In this condition, early detection of visceral arteriovenous malformations can prevent disabling complications (pulmonary bleeding, ischemic stroke, brain abscesses) (Tabassom & Dahlstrom, 2022; Al-Samkari *et al*., 2025).

The purpose of this review is to systematize current data on the epidemiology, etiology, diagnosis, and consequences of recurrent epistaxis in adults (Karunakaran *et al*., 2023; Maktabi *et al*., 2023; Poornachitra & Maheswari, 2023; Akhmedov *et al*., 2024). It also aims to propose a practical diagnostic algorithm (checklist) for primary care physicians, otorhinolaryngologists, internists, and hematologists. Special attention is given to "red flags" that point to systemic diseases, as well as to the psychosocial consequences of chronic blood loss, which often remain outside the clinician's field of view. The review is intended for practicing physicians, clinical residents, and senior medical students.

Epidemiology and Burden of Recurrent Epistaxis in Adults

Recurrent epistaxis is among the most common reasons for visiting an otorhinolaryngologist and an emergency department. It affects up to 15–20% of the adult population during their lifetime (Ruhela *et al*., 2023; Al-Samkari *et al*., 2024). Unlike single episodes, which are usually associated with trauma or dry air, the recurrent form (defined as three or more episodes per month or repeated bleeding for more than three months) occurs in approximately 5–8% of adults. Its prevalence increases with age (Pr & Shankar, 2024). Age distribution is bimodal. The first peak occurs in children and adolescents (mostly idiopathic or traumatic bleeding). The second peak occurs after age 50, where systemic vascular changes, arterial hypertension, use of anticoagulants and antiplatelets, as well as diseases such as hereditary hemorrhagic telangiectasia and chronic liver disease dominate (Ahn & Min, 2022; Stanković *et al*., 2022). Among elderly patients taking antithrombotic drugs, the frequency of recurrent epistaxis reaches 30–35%. This group also has a higher risk of severe bleeding requiring hospitalization and invasive hemostatic methods (Yaniv *et al*., 2021).

The economic and social burden of recurrent epistaxis is often underestimated. In the United States, more than 350,000 emergency department visits for epistaxis are recorded annually. About 20% of these are repeat episodes in the same patients (Zloczower *et al*., 2024). Hospitalization is required in 6–10% of cases. The average hospital stay is 2–3 days. Direct medical costs per patient can reach several thousand dollars (Maina & Ooi, 2022). The situation is similar in European countries. Recurrent epistaxis is one of the main reasons for referral from primary care to an ENT specialist, creating additional burden on outpatient services (Burke *et al*., 2024). Indirect costs related to temporary disability, reduced productivity, and psychological discomfort are less studied (Garbarova & Vartiak, 2024; Pham, 2024; Rohmani *et al*., 2024). However, available data indicate that patients with frequent nosebleeds miss an average of 2–3 working days per year due to the episodes themselves or subsequent examinations (Valencia-Sanchez & Donaldson, 2026). Moreover, the anxiety of waiting for the next bleeding can lead to refusal to travel, physical activity, and even changing jobs, which significantly reduces quality of life (Yang *et al*., 2023).

Etiology of Recurrent Epistaxis: From Local Disorders to Systemic "Red Flags"

Understanding the causes of recurrent epistaxis requires a distinction between local and systemic factors. Local causes, most often identified by anterior rhinoscopy or endoscopic examination, include anatomical abnormalities (marked nasal septum deviation, spurs and ridges), inflammatory diseases (chronic rhinitis, atrophic rhinitis including ozena), trauma (including habitual nose picking), iatrogenic damage (after intubation, nasogastric tube, surgical interventions), as well as benign and malignant neoplasms (hemangioma, juvenile angiofibroma, carcinoma) (Mrzljak *et al*., 2021; Cappello *et al*., 2024). Atrophic rhinitis, whether primary or post radiation, is characterized by thinning of the mucous membrane, crust formation, and increased capillary fragility. This creates a favorable background for repeated bleeding (Lewandowska, 2025). However, in adult patients, especially those over 40 years old, one cannot limit the search to local pathology alone, because a systemic disease may be hidden behind the recurrent course (Weyand & Flood, 2021).

Among systemic causes, disorders of the hemostatic system occupy a leading position. The most common inherited coagulopathy is von Willebrand disease, which occurs in 0.6–1.3% of the population. In its mild forms, it often remains undiagnosed until recurrent nosebleeds or menorrhagia appear (James *et al*., 2024). In such patients, bleeding usually begins in childhood but may manifest in adulthood after trauma or surgery (Harris *et al*., 2022). Thrombocytopenias of various origins (immune, drug induced, hypersplenism, aplastic) also present with petechial rash, gum bleeding, and recurrent nosebleeds (Chitsuthipakorn *et al*., 2023). Hemophilia A and B in adults are rare causes, but they should be excluded in cases of isolated prolongation of activated partial thromboplastin time and a history of hemorrhagic syndrome since childhood (Thiele *et al*., 2023).

Hereditary hemorrhagic telangiectasia (Osler–Weber–Rendu disease) is a classic example of a disease in which recurrent nosebleeds are the earliest and most common symptom, occurring in 90–95% of patients by age 30 (Hammill *et al*., 2021). The diagnosis is based on the Curaçao criteria: spontaneous recurrent nosebleeds, multiple telangiectasias on the skin and mucous membranes, visceral arteriovenous malformations, and a family history (Abiri *et al*., 2020). Even a single telangiectasia on the lips, tongue, or fingertips, combined with recurrent nosebleeds, strongly suggests a diagnosis of HHT (Ficany *et al*., 2025).

Arterial hypertension has long been considered a direct cause of nosebleeds. However, modern meta analyses show a weak association between blood pressure levels and the frequency of episodes (adjusted odds ratio approximately 1.53). This association is likely explained by common risk factors (atherosclerosis, age, anticoagulant use) (Platton *et al*., 2024). Nevertheless, in patients with hypertension, nosebleeds are often more severe and more frequently require hospitalization (García & Jaramillo, 2023; Nezhadrahim *et al*., 2023; Poornachitra &

Maheswari, 2023; Abdel-Qader *et al*., 2024; Chen *et al*., 2024; Saputra *et al*., 2024). Therefore, blood pressure control is an important component of prevention (Aggarwal *et al*., 2025). Chronic liver disease, especially at the stage of cirrhosis with portal hypertension and coagulopathy, is also associated with increased bleeding, including nosebleeds, which may be the first sign of liver failure (Ukawat *et al*., 2024).

Use of medications that affect hemostasis is another common systemic cause (Bergeron *et al*., 2024; Jabir & Rajab, 2024). Studies report that up to 53% of adults with recurrent nosebleeds take anticoagulants (warfarin, rivaroxaban, apixaban, dabigatran) or antiplatelets (acetylsalicylic acid, clopidogrel, ticagrelor) (Modesti *et al*., 2024). The risk is particularly high in patients receiving dual antiplatelet therapy or a combination of an anticoagulant and an antiplatelet agent (Matsuura & Imajo, 2023). Non steroidal anti inflammatory drugs, especially with long term use, can also increase bleeding by inhibiting thromboxane synthesis and impairing platelet aggregation (Hermann *et al*., 2025).

Among rare but important causes are vasculitides, primarily granulomatosis with polyangiitis (Wegener's disease). In this condition, nosebleeds are combined with ulcerative necrotic changes of the nasal septum, purulent bloody discharge, and later with a saddle nose deformity (Ortman & Ortolani, 2024). According to clinical series, up to 11% of patients with granulomatosis with polyangiitis seek medical attention precisely because of recurrent nosebleeds (Génin *et al*., 2025). Other systemic diseases, such as amyloidosis, systemic lupus erythematosus, and antiphospholipid syndrome, may present with a hemorrhagic syndrome, including nosebleeds, but this is usually part of a more extensive clinical picture (Krol *et al*., 2023). Vitamin C and K deficiencies are rare in developed countries but may be relevant in patients with alcoholism, malabsorption, or severe diets (Steinke & Welkoborsky, 2022). A detailed differential diagnosis of causes, red flags, and minimum diagnostic tests is presented in **Table 1**.

Table 1. Causes of recurrent epistaxis in adults: red flags and minimum diagnostic work-up

Category	Disease/condition	Key red flags (history, examination)	Minimum diagnostic tests
Vascular anomalies	Hereditary hemorrhagic telangiectasia (Osler–Weber–Rendu disease)	Telangiectasias on lips, tongue, fingers, mucous membranes; family history; recurrent bleeding since childhood	Skin and mucous membrane examination; contrast echocardiography; genetic counseling
Hematological	Von Willebrand disease	Menorrhagia, easy bruising, gum bleeding; family history	VWF:Ag, VWF:RCo, factor VIII; PFA-100
	Thrombocytopenias (immune, drug-induced, hypersplenism)	Petechiae, ecchymoses, gum bleeding; hepatosplenomegaly	CBC with platelet count; blood smear microscopy; trephine biopsy if needed
	Hemophilia A and B (rare but possible in adults)	Prolonged aPTT; bleeding after invasive procedures; childhood history	aPTT, factor VIII, factor IX; inhibitor screening
Systemic and metabolic	Arterial hypertension	Frequent association with severe bleeding; not always a direct cause	Blood pressure monitoring; ECG; echocardiography (if LV hypertrophy)
	Chronic liver disease (coagulopathy, portal hypertension)	Jaundice, trunk telangiectasias, ascites, esophageal varices	Liver function tests (ALT, AST, GGT, bilirubin, albumin); coagulation tests (INR, PT); abdominal ultrasound
	Chronic kidney disease (uremic platelet dysfunction)	Edema, azotemia, arterial hypertension; bleeding worsens with high urea	Creatinine, GFR; bleeding time assessment (optional)
Inflammatory and autoimmune	Granulomatosis with polyangiitis (Wegener's)	Purulent-bloody discharge, septal ulceration, saddle-nose deformity; arthralgias, lung or kidney involvement	c-ANCA (anti-PR3); sinus X-ray/CT; nasal mucosal biopsy
	Systemic lupus erythematosus	Rash, photosensitivity, arthritis, serositis; thrombocytopenia or antiphospholipid syndrome	ANA, anti-dsDNA; CBC; coagulation tests (lupus anticoagulant)
Drug-induced	Anticoagulants (warfarin, DOACs)	Drug use; INR above therapeutic range (for warfarin); sudden onset at stable dose	INR (warfarin); renal function assessment (DOACs); discontinuation/adjustment under supervision
	Antiplatelets (aspirin, clopidogrel, ticagrelor)	Drug use usually does not cause isolated bleeding, but it worsens other causes.	Platelet function tests (not routine); clinical assessment
	NSAIDs (long-term use)	Especially in elderly patients with comorbidities, gastropathy	Clinical assessment; trial discontinuation
Local anatomical	Nasal septum deviation + Kiesselbach's area	Bleeding from one nostril; dryness, crusts; history of trauma or surgery	Anterior rhinoscopy; nasal endoscopy
	Atrophic rhinitis (primary, post-radiation, post-surgical)	Mucosal thinning, crusts, foul odor (ozena), recurrent bleeding	Rhinoscopy; sinus CT (if bone changes suspected)

Note to the table: This list is not exhaustive but covers the most clinically significant causes. The choice of tests depends on availability and clinical context. For each patient, one should start with non-invasive methods (CBC, coagulation tests, biochemistry) and expand the search in the presence of "red flags."

Diagnostic Work Up: From Initial Examination to Specialized Tests

The diagnostic algorithm for recurrent epistaxis begins with confirming the recurrent nature of bleeding and assessing the patient's hemodynamic status. Initial examination includes measuring blood pressure and heart rate, evaluating the skin for pallor (a sign of anemia) or petechiae, and performing anterior rhinoscopy to identify the source of bleeding (Thangavelu *et al*., 2021; Janapala *et al*., 2022). If a source is found (for example, a visible vessel in Kiesselbach's area) and bleeding can be stopped with local methods (silver nitrate cauterization, electrocoagulation, packing), this does not rule out the need for further investigation in cases of recurrent bleeding (Matti *et al*., 2021; Li *et al*., 2023). Nasal endoscopy is the gold standard for visualization. It allows examination of the posterior nasal cavity, choanae, sinus ostia, and detection of telangiectasias, vascular malformations, or neoplasms that are not accessible by anterior rhinoscopy (Coggins *et al*., 2023).

Laboratory testing is performed in stages. The first (screening) level includes a complete blood count with platelet count, coagulation tests (prothrombin time, activated partial thromboplastin time, international normalized ratio, fibrinogen), and biochemical analysis with liver function tests (ALT, AST, GGT, bilirubin, albumin) and creatinine with urea (Choi *et al*., 2017; Bate *et al*., 2023; Wei *et al*., 2024; Soudry *et al*., 2026). This panel allows detection of thrombocytopenia, coagulopathy, liver or kidney failure. The second level is indicated when basic test results are normal, but recurrences persist, or clinical suspicion remains. It includes platelet function testing (light transmission aggregometry or PFA-100), measurement of von Willebrand factor antigen and activity, and factors VIII and IX (if aPTT is prolonged) (Lechien *et al*., 2025). The third level involves genetic tests: sequencing of the ENG, ACVRL1, and SMAD4 genes when HHT is suspected; analysis of the F8 and F9 genes for hemophilia; and VWF gene testing for von Willebrand disease (Lou *et al*., 2025a, 2025b).

Serological tests are used when vasculitides or autoimmune diseases are suspected. These include detection of anti neutrophil cytoplasmic antibodies (c ANCA, p ANCA), antinuclear antibodies, anti double stranded DNA antibodies, and lupus anticoagulant (Johnsen, 2024). Imaging methods (computed tomography of the paranasal sinuses, magnetic resonance imaging of the brain, and angiography) are indicated when a neoplasm or arteriovenous malformation is suspected or when surgical treatment is planned (Nichols *et al*., 2008; James *et al*., 2009). Electrocardiography and echocardiography, as mentioned earlier, are not methods for identifying the cause of bleeding. However, they are necessary to assess the consequences of chronic anemia and to detect visceral malformations in HHT (Markussen *et al*., 2021; Girard *et al*., 2022). The diagnostic algorithm described above is summarized in the flowchart shown in **Figure 1.**

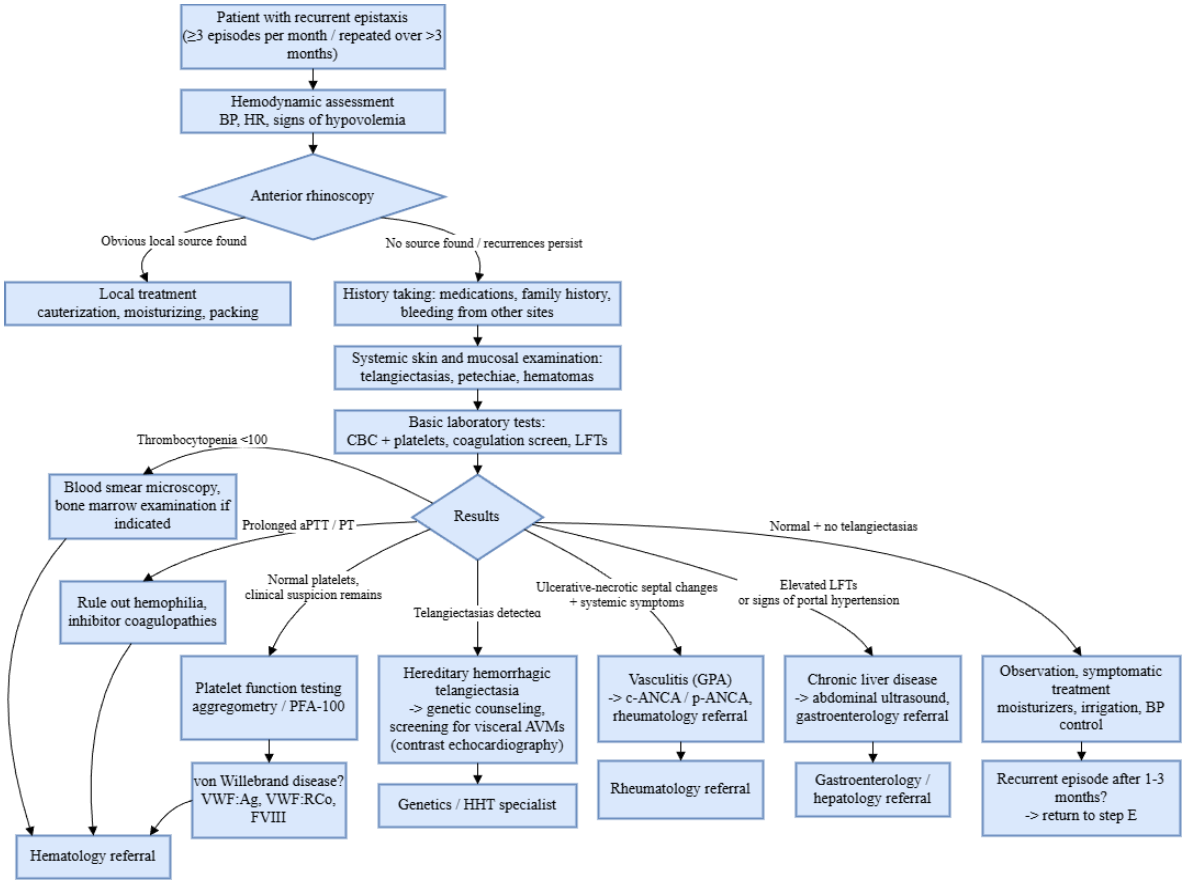

Figure 1. Diagnostic algorithm for recurrent epistaxis in adults

Consequences of Recurrent Epistaxis

Chronic repeated blood loss from the nasal vessels inevitably leads to iron deficiency anemia. According to prospective cohort studies, in adults with nosebleeds more than once a week for six months, a drop in hemoglobin below 110 g/L is recorded in 40–55% of cases. Anemia develops faster in women of reproductive age due to additional menstrual blood loss (Al-Samkari, 2024; Kasthuri, 2025). Typical laboratory markers include hypochromia, microcytosis, low ferritin (<30 μg/L), and increased total iron-binding capacity (Mozdon *et al*., 2023). In patients with hereditary hemorrhagic telangiectasia, anemia often reaches severe levels (hemoglobin <80 g/L). This requires red blood cell transfusions and intravenous iron (Pagella *et al.,* 2021; Trevise *et al.*, 2023). Prolonged iron deficiency is accompanied by extra-hematological manifestations: dry skin, brittle nails, hair loss, distortion of taste and smell, as well as cognitive impairment (reduced concentration, memory loss), especially pronounced in older adults (Tunkel *et al.,* 2020; Hayama *et al*., 2024).

The cardiovascular system is the next target of chronic anemia. Compensatory mechanisms include tachycardia, increased stroke volume, and reduced peripheral resistance (Basiari *et al*., 2024; Gong *et al*., 2024). With long-standing anemia, especially in patients with pre-existing dilated cardiomyopathy, coronary artery disease, or hypertension, high-output heart failure develops. It presents with dyspnea, edema, and reduced exercise tolerance (Javed *et al*., 2024; Cerrone *et al.,* 2025). ECG shows sinus tachycardia, flattened T waves, and sometimes ST depression (Eden *et al*., 2026). Echocardiography can assess ejection fraction and detect signs of pulmonary hypertension, which often accompanies severe anemia and arteriovenous malformations in HHT (Layton *et al*., 2007; Hessels *et al*., 2025).

The most severe and least noticeable consequence is the impact on the psycho-emotional sphere. Studies using questionnaires (ESS, SF-36, HADS) show that patients with frequent nosebleeds suffer from clinically significant anxiety and depression much more often than the general population (Gottlieb & Long, 2023; Gong *et al*., 2025). Anticipatory anxiety of the next bleeding becomes dominant. The patient is afraid to sneeze, blow their nose, bend over, or sleep on their side (Fisher & Fishman, 2024; McHugh *et al.,* 2025). This leads to chronic exhaustion, difficulty falling asleep, and shallow sleep (Kolarich *et al*., 2021).

Social isolation is a direct consequence of this fear. Patients avoid public places (restaurants, theaters, public transport) and refuse to fly because of pressure changes (Crouch-Smith *et al*., 2021; Bickerton *et al*., 2025). They stop going to swimming pools and saunas, and avoid physical activity and even sexual activity (Gaetani *et al*., 2021; Gong *et al*., 2024). In the professional sphere, teachers, lecturers, and doctors experience chronic stress. According to survey data, 38% missed a workday in the last three months, and 12% changed jobs to a "safer" one (Andorfer *et al*., 2022; Kim *et al*., 2024).

Stigmatization makes the situation worse. Blood on the face is perceived by others as a sign of serious illness or aggression, causing shame (Andorfer *et al*., 2022; Álvarez-Hernández *et al*., 2023). In HHT, more than 60% of patients reported that nosebleeds affected their intimate relationships (Passali *et al*., 2024). In children and adolescents, school maladaptation and bullying are observed (Breton *et al*., 2024). It is important to emphasize that these consequences do not directly correlate with the volume of blood loss. Even rare but unpredictable episodes can cause severe anxiety (Al-Samkari *et al*., 2026). Unfortunately, these aspects are rarely discussed in routine practice. Correction requires teaching patients self-help methods, prescribing moisturizers, and, for severe anxiety, consultation with a psychologist or psychiatrist (possibly SSRIs) (Bansal *et al*., 2024; Zhang *et al*., 2024).

Results and Discussion

This review systematizes data on the epidemiology, etiology, diagnosis, and consequences of recurrent epistaxis in adults. It offers a practical algorithm for primary care physicians. The key conclusion is the need for active searching for systemic diseases in patients with recurrent episodes. This is especially important when there is no local cause, local treatment is ineffective, or there are "red flags" (telangiectasias, family history, bleeding from other sites, use of anticoagulants, systemic symptoms) (Kasle *et al*., 2021; Koskinas *et al*., 2024). This approach is consistent with the Curaçao criteria for HHT and guidelines for von Willebrand disease (Berry *et al*., 2021). However, the evidence base for many diagnostic strategies remains limited, which opens up a field for further research (Bereda, 2023).

The role of arterial hypertension remains a controversial issue. Large meta-analyses have shown only a weak association between blood pressure levels and the frequency of episodes, even after adjusting for age and anticoagulants (Albarki & Rimmer, 2022; Shovlin *et al*., 2022). Nevertheless, clinical experience suggests that in uncontrolled hypertension, bleeding is more severe and recurs more often, possibly due to atherosclerotic vascular remodeling (Reed *et al*., 2021). Blood pressure control should be considered an important component of patient management, but not as a primary prevention measure (Casini *et al*., 2024).

Diagnostic value of laboratory tests: screening (CBC, coagulation tests, liver function tests) has high sensitivity for gross abnormalities, but may miss mild forms of von Willebrand disease and early stages of HHT (Giorgio *et al*., 2025; Palermo & Sturiale, 2026). Advanced testing requires resources, so a stepwise approach is optimal: basic tests for everyone, and in depth testing only when "red flags" are present (Yuan *et al*., 2024).

Psychosocial consequences deserve special attention. In the literature, disproportionately little space is devoted to this topic (Munro *et al*., 2023). The level of anxiety and depression in these patients is comparable to that in cancer patients, but doctors rarely assess mental status (Kumar *et al*., 2022). Standard quality of life questionnaires are not sufficiently sensitive to specific problems (fear of a public episode, avoidance of exertion) (Conde Díez *et al*., 2024).

Compared with previous reviews, most publications focus on narrow aspects (either HHT or anticoagulants). Our review combines local and systemic causes into a single algorithm, includes a detailed table, and, for the first time, discusses

psychoemotional consequences in detail (Palma-Barqueros *et al*., 2021). Limitations: narrative nature, possible language bias, and lack of prospective validation of the algorithm (Devabalan *et al*., 2021).

Clinical Implications

1. Go beyond the "weak vessels" mindset: take a family, medication, and systemic history.
2. Expand the physical examination to include inspection for telangiectasias, petechiae, and signs of liver disease.
3. Minimum laboratory tests: CBC with platelets, coagulation tests, and liver function tests.
4. For confirmed HHT, screen for visceral malformations (contrast echocardiography, MRI).
5. Assess ferritin even in the absence of severe anemia and prescribe iron if it is low.
6. Identify psycho-emotional disorders with two questions about fear of bleeding and activity limitation; if answers are positive, refer to a psychologist or consider anxiolytics (Green *et al*., 2023).

Unresolved issues: optimal follow-up intervals after negative basic tests; the need for prophylactic therapy in mild forms of von Willebrand disease; the long-term effectiveness of local hemostasis methods; the impact of early detection of systemic disease on long-term outcomes. Answers require prospective multicenter studies (Ahmed *et al*., 2021).

Conclusion

Recurrent epistaxis in adults is not an isolated local problem but an important clinical marker. In a significant proportion of cases, it masks systemic diseases: inherited coagulopathies (von Willebrand disease, hemophilia), hereditary hemorrhagic telangiectasia, chronic liver disease, vasculitides, and iatrogenic hemostatic disorders associated with anticoagulants and antiplatelet agents. Ignoring this fact leads to repeated visits over many years and progression of anemia, whereas timely diagnosis allows specific therapy to be initiated.

Based on this analysis, the following practical algorithm is proposed. First step: confirm the recurrent nature (three or more episodes per month or repeated bleeding for more than three months) and assess hemodynamics. Second step: take a history – family history of bleeding diatheses, medication use, gum bleeding, gastrointestinal bleeding, menorrhagia, systemic symptoms (arthralgias, rash, renal or pulmonary involvement). Third step: physical examination – anterior rhinoscopy and search for telangiectasias on the lips, tongue, fingers, petechiae, and hematomas. Fourth step: minimum laboratory panel – complete blood count with platelets, coagulation tests (PT, aPTT, INR), liver function tests (ALT, AST, GGT, bilirubin, albumin), and ferritin level. If abnormalities or "red flags" are present, advanced testing is indicated: von Willebrand factor assay, aggregometry, genetic tests for HHT, anti-neutrophil antibodies, as well as nasal endoscopy, contrast echocardiography, sinus CT, and abdominal ultrasound.

Chronic post-hemorrhagic anemia develops in most patients with frequent recurrences and requires iron replacement (orally or intravenously), and in severe cases, red blood cell transfusions. Cardiovascular complications (high-output heart failure) occur mainly in elderly patients with concomitant cardiac disease and require joint management by a cardiologist and hematologist. Psychological and-emotional consequences (anticipatory anxiety, social isolation, occupational maladjustment) are found in most patients but are rarely discussed. It is enough for a physician to ask two questions – about fear of the next bleeding and about activity limitation – to suspect clinically significant anxiety, which can be corrected by teaching self-help methods, prescribing moisturizers, and, if necessary, cognitive-behavioral therapy or anxiolytics.

The presented diagnostic algorithm **(Figure 1)** and differential diagnosis table **(Table 1)** are practical tools for otorhinolaryngologists, internists, and emergency physicians. However, they require prospective validation in real-world practice. Until such data are available, the proposed algorithm should be considered a reasonable clinical guide based on the best available evidence.

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