

Abstract Submission Information and Instructions

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I. GENERAL INFORMATION

A. Presentation categories

Clinical case study

A case study is a presentation that describes a problem and the means used to resolve the situation. The case may involve a patient or in rare cases, more than one patient, who presents with an unusual disease or a common disease with unusual clinical presentation, complication, or outcome. The clinical diagnosis requires an extended battery of tests to confirm. Clinical diagnosis and laboratory findings relate to the patient's symptoms. Abstracts for a clinical case study should include:

- a short description of the patient history/presentation/problem,
- significant diagnostic laboratory tests results,
- patient outcome, and
- a short description of the disease/condition.

Management/education case study

A case in management may involve creative scheduling, compliance or personnel issues, or an ethical dilemma. Problems encountered in CLS/CLT education may involve issues such as admission/dismissal policy, competency testing, or recruitment and retention. The case describes the significance and implication of the problem to the clinical laboratory practice. The case presents strategies utilized to resolve the dilemma. Abstracts for a management or education case study should include:

- a short description of the problem or dilemma.
- underlying principle for resolving the issue.
- brief description of the strategy used.
- outcome or resolution.

Research

A research presentation characterizes a structured investigation of a specific problem. The research investigation presents the:

- nature of the problem investigated,
- reasons/significance for investigating,
- scope of the problem,
- brief review of pertinent literature,
- research hypothesis,
- brief description of materials and methods used,
- representative data, and the
- conclusion.

The abstract must:

- state the nature of the problem investigated,
- provide reasons for investigating,
- describe the methodology,
- summarize the results, and
- state the conclusion.

B. Submission information

1. Abstracts must be submitted according to instructions below and **must be received by January 15**.
2. An individual's name may appear as an author in no more than two abstracts at the same meeting.
3. An author may present only one oral presentation and one poster presentation at the same meeting.
4. A nonmember may submit an abstract for presentation if an ASCLS member is a coauthor.
5. All presenting authors must register for the meeting.
6. All abstracts must be original and not submitted for presentation at any other meeting(s).
7. All abstracts, case study or research, may be accepted for either oral or poster presentation.

II. PREPARATION AND SUBMISSION INSTRUCTIONS

A. Preparation of abstracts

1. **Title:** Use concise title (five or six words, if possible) that reflects abstract content. Capitalize the first letter of first word and all other words except prepositions, conjunctions, and articles. Underline scientific genus and species names of organisms. Do not use acronyms, abbreviations, or initials in a title.
2. **Author/Institution:** List the presenting author first, in **boldface** type. When multiple authors submit an abstract, clearly identify **one** contact author and provide complete contact information. Limit academic degrees to highest degree earned, master's and doctoral degrees only. List author institution affiliation (excluding department or division information), followed by the city and state of the institution, except when authors share the same institutional affiliation. (See sample abstract below for reference.)

3. **Abstract:** All abstracts must be typed double-spaced on plain, white 8 1/2 x 11-inch paper with 1 inch margins. Courier is the recommended font, 10-point type. Abstract text format is flush left. Text length (not including title and author information) must be at least 100, not to exceed 200, words. Use a single-space-return to separate title, author information, and the abstract. (See sample abstract below for reference.) To encourage consistency in style, refer to guidelines in *Scientific Style and Format* – The Council of Biology Editors Manual for Authors, Editors, and Publishers, 6th Edition.

Authors of abstracts for poster presentations must follow the same guidelines for oral presentations. In addition, poster presenters are required to submit three (3) multiple-choice questions. Each question should have four (4) response choices. Authors must provide an answer key. The presenter will post these questions as part of the poster display. ASCLS members who visit and review five posters and answer the questions from those posters may receive 1.0 contact hour of P.A.C.E.® credit.

B. Abstract proposal submission

1. All abstract proposals must be submitted electronically (Word or Wordperfect) with a fully completed proposal form.
2. Only abstracts submitted electronically will be considered for review; mailed copies are NOT needed. E-mail the

abstract and proposal form to joanp@ascls.org. The completed and signed abstract proposal form may be faxed to (303)904-8933.

3. The abstract proposal form is also available at www.ascls.org/conferences/index.asp. Follow above instructions for preparation and submission.

C. Review, acceptance, and notification

Members of the ASCLS Abstract Review Committee review all abstract submissions. Authors will receive written notification of abstract acceptance/rejection in late-March. The letter of acceptance will include information on the presentation date and time of the presentation. Accepted abstracts are edited for publication in *Clinical Laboratory Science*.

D. Presentations and poster display provisions

Each oral presentation is limited to 15 minutes. Authors of poster presentations are provided with an approximately 4-foot-high x 8-foot-wide bulletin board to display a summary of the paper. Exact poster specifications will be included in the abstract acceptance letter.

E. Questions

Questions regarding these instructions should be directed to Joan Polancic, ASCLS Director of Education and Project Planning at joanp@ascls.org or (301)657-2768.

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III. SAMPLE ABSTRACT

Effects of Exercise on Cholesterol and Hormone Levels of Premenopausal and Perimenopausal Women

Diane M Cearlock PhD CLS (NCA), Nancy A Nuzzo PhD, Northern Illinois University, DeKalb IL

The purpose of this study was to compare the effects of regular moderate exercise on cholesterol and hormone (cortisol, growth hormone, and estrogen) levels in premenopausal and perimenopausal women. Little has been published about the effects of exercise on the levels of these analytes in perimenopausal women. These hormones typically diminish with age, but exercise may promote increased secretion. Fifteen premenopausal women (ages 20 to 30 years) and 11 perimenopausal women (ages 40 to 50 years) participated in a 4-week, 3-times-per-week exercise program. Once a week for 6 weeks, blood samples were collected from each participant, preexercise, during exercise, and postexercise. Data indicated that all analyte concentrations of the premenopausal women remained stable throughout the program. In contrast, there was a significant ($p < 0.5$) decrease in cholesterol levels of the perimenopausal women when comparing week 0 to week 4, but not when comparing week 0 to week 5, suggesting that exercise lowers cholesterol in perimenopausal women, but the effect was sustained only if exercise was continued. There were no significant differences in the cortisol values of the perimenopausal women, suggesting that the exercise did not activate inflammatory responses to a significant extent. The investigators concluded that the exercise program was safe for use in a similar study involving older women (ages 60 to 75 years). Growth hormone and estrogen values are currently being analyzed.

2005 ANNUAL MEETING ABSTRACT PROPOSAL FORM

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Please complete all the requested information on this form. This form must accompany all submitted abstracts. Abstracts must be submitted electronically by January 15, 2005 for the 2005 ASCLS Annual Meeting.

TITLE

Contact/Presenting Author:

NAME: _____

DEGREE: _____ CREDENTIAL: _____

INSTITUTION: _____

Address:

City/State/Zip: _____

Home phone: (_____) _____

Work phone: (_____) _____

Fax: (_____) _____

E-mail address: _____

ASCLS member number: _____

Signature of contact/presenting author: _____

DISCIPLINE

Check only ONE:

___ Administration

___ Biochemistry/Urinalysis/Ligand Immunoassay

___ Consultants' Forum

___ Education

___ Hematology/Hemostasis

___ Immunology/Immunohematology

___ Microbiology

___ Other (please specify)

PRESENTATION

Check only ONE:

___ Abstract for **oral presentation** only

___ Abstract for **poster presentation** only

___ Abstract for either **oral or poster presentation**

___ Abstract for **case study presentation**

Before mailing information, enclose the following:

- ___ Abstract typed in appropriate format
- ___ Completed abstract proposal form
- ___ Signature of presenting author
- ___ Discipline specified
- ___ Type presentation specified
- ___ Questions/answer key (posters only)

E-mail all materials to:

ASCLS 2005 Abstract Review Committee
joanp@ascls.org

Fax completed and signed form to:

(303)904-8933

Continuing Education Questions

SUMMER 2004

To receive 3.0 contact hours of intermediate level P.A.C.E®., credit for the **Focus: Bone Marrow Failure Anemias** questions, insert your answers in the appropriate spots on the immediately following page; then complete and mail the form as directed.

NOTE: There may be more answer spaces on the answer sheet than needed. If so, leave them blank. Make sure the number of the answer space you fill matches the number of the question you are answering.

LEARNING OBJECTIVES

After reading *Bone Marrow Failure Anemias, Acquired Aplastic Anemia, Paroxysmal Nocturnal Hemoglobinuria, and Refractory Anemia and Myelodysplastic Syndromes* the reader will be able to:

1. Describe key characteristics of the peripheral blood and bone marrow in acquired aplastic anemia (AA), paroxysmal nocturnal hemoglobinuria (PNH), and the myelodysplastic syndromes (MDS).
2. Describe the primary hematopoietic defect in AA, PNH, and MDS.
3. Differentiate the pathophysiology of the anemia seen in AA, PNH, and the MDS.
4. Describe criteria used to classify AA as moderate, severe, or very severe.
5. Describe the relationship between a deficiency of the membrane glycosylphosphatidylinositol anchor and an increased susceptibility for hemolytic anemia.
6. Compare the specificity of the sucrose hemolysis test with flow cytometry in detection of PNH cells.
7. Define refractory anemia and its relationship to MDS.
8. List subgroups of the myeloproliferative disorders and the major characteristics of each according to the WHO classification system.
9. Describe major changes between the FAB and WHO classification systems in the MDS.

10. Discuss laboratory tests that are helpful to distinguish AA, PNH, and the MDS.
11. Describe treatment options for AA, PNH, and MDS.
12. Describe factors that affect the prognosis in AA and PNH.
13. Specify criteria upon which the international prognostic scoring system (IPSS) for the MDS may be used.
14. Summarize the inter-relationship of AA, PNH, and MDS.

CONTINUING EDUCATION QUESTIONS

1. Peripheral blood findings that are common to AA, PNH, and MDS include:
 - a. cytopenias and macrocytosis.
 - b. reticulocytosis and nucleated red blood cells.
 - c. blasts and dyspoiesis of one or more cell lines.
 - d. dimorphic red blood cells and immature granulocytes.
2. A somatic mutation in the phosphatidylinositol glycan complementation group A gene on the X chromosome is characteristic of:
 - a. AA.
 - b. RA.
 - c. PNH.
 - d. MDS.
3. The pancytopenia in AA is due to:
 - a. complement-mediated cell lysis.
 - b. autoimmune T-cell destruction of stem cells.
 - c. mutations in stem cells and ineffective hematopoiesis.
 - d. defective stromal cell support of hematopoietic progenitor cells.
4. AA with a neutrophil count of $0.3 \times 10^9/L$, platelet count of $10 \times 10^9/L$, reticulocyte count of $5 \times 10^9/L$ and 10% cellularity in the bone marrow would be classified as:
 - a. non-severe.
 - b. moderate.
 - c. severe.
 - d. very severe.

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Sharon M Miller is the liaison for the CLS Continuing Education section. She reviews Focus articles, assigns contact hours, and edits learning objectives and test questions. Direct all continuing education inquiries to Sharon M Miller, 7N591 Cloverfield Circle, St Charles, IL 60175. (630) 513-1986. smmiller@elnet.com

FOCUS: BONE MARROW FAILURE ANEMIAS

5. The typical bone marrow picture in RA is:
 - a. hypocellular with pancytopenia.
 - b. hypocellular with ringed sideroblasts.
 - c. hypercellular with erythroid hyperplasia.
 - d. normocellular with myeloid hyperplasia.
6. One of the reasons for the ineffective hematopoiesis in the MDS is the:
 - a. interference with DNA synthesis of progenitor cells.
 - b. premature apoptosis of progenitor cells in the bone marrow.
 - c. suppression of progenitor cells due to exposure to toxic substances.
 - d. increased destruction of hematopoietic progenitor cells by cytotoxic T-cells.
7. CD55 and CD59 are absent from the surface of erythrocytes in PNH because the:
 - a. RBC membrane lacks the GPI anchor.
 - b. genes for CD55 and CD59 are deleted.
 - c. excessive complement activation causes their degradation.
 - d. erythrocyte progenitors are attacked by autoreactive T-cells.
8. CD59 on the erythrocyte surface prevents complement-mediated lysis by inhibiting the:
 - a. formation of the C5b-8 complex.
 - b. formation of the C3bBb complex.
 - c. binding of C9 units to form the membrane attack unit.
 - d. binding of C3b units to activate the alternate pathway.
9. The most specific test for diagnosis of PNH is:
 - a. a bone marrow biopsy.
 - b. the sucrose hemolysis test.
 - c. cytogenetic analysis of stem cells.
 - d. immunophenotyping by flow cytometry.
10. Anemia that is unresponsive to all conventional forms of therapy is called:
 - a. dysplastic.
 - b. hemolytic.
 - c. refractory.
 - d. megaloblastic.
11. The main difference in the RAEB-1 and RAEB-2 categories of MDS is the number of:
 - a. cytopenias.
 - b. cell lines exhibiting dysplasia.
 - c. monocytes in the peripheral blood.
 - d. blasts in the peripheral blood and bone marrow.
12. The criteria of the WHO classification of MDS differs from the FAB classification in that it includes:
 - a. cytogenetics.
 - b. morphological features.
 - c. degree of dyspoiesis in the bone marrow.
 - d. peripheral blood and bone marrow blast counts.
13. According to the WHO classification system, the number of blasts in the bone marrow that would distinguish an acute myeloid leukemia from RAEB-2 is:
 - a. 10%.
 - b. 20%.
 - c. 30%.
 - d. 40%.
14. Which of the following would help distinguish PNH from AA or MDS?
 - a. Dysplasia of all cell lines
 - b. Peripheral blood pancytopenia
 - c. Reticulocytosis and hemoglobinuria
 - d. Abnormalities of chromosomes 5, 7, and 8
15. Chromosome abnormalities at presentation are most typically found in:
 - a. AA.
 - b. RA.
 - c. PNH.
 - d. MDS.
16. Which of the following is an indication of chronic intravascular hemolysis in PNH?
 - a. Reticulocytosis
 - b. Splenomegaly
 - c. Hemosiderinuria
 - d. Coexpression of CD55⁺ CD59⁺
17. Which of the following can be found in both AA and MDS?
 - a. Reticulocytosis and microcytosis
 - b. Hypocellular marrow and dyserythropoiesis
 - c. Dysgranulopoiesis and dysmegakaryocytopoiesis
 - d. Blasts and immature granulocytes in the peripheral blood

FOCUS: BONE MARROW FAILURE ANEMIAS

18. The only available treatment for AA, PNH, and MDS with the potential for a cure is:
 - a. chemotherapy.
 - b. chronic transfusion.
 - c. immunosuppression.
 - d. hematopoietic stem cell transplant.
19. Antithymocyte globulin and cyclosporine is a standard treatment regimen for:
 - a. AA.
 - b. RA.
 - c. PNH.
 - d. MDS.
20. A major complication in PNH that causes a fatal outcome in 40% of cases is:
 - a. renal failure.
 - b. bacterial sepsis.
 - c. venous thrombosis.
 - d. cerebral hemorrhage.
21. Which of the MDS subgroups has the best prognosis?
 - a. RA
 - b. RARS
 - c. RCMD
 - d. 5q- syndrome
22. The International Prognosis Scoring System for MDS is based upon the number of:
 - a. cytopenias, % blasts in bone marrow, karyotype.
 - b. years until transformation to AML, karyotype.
 - c. cell lines with dysplastic features, % blasts in blood and bone marrow.
 - d. cytopenias, % blasts in the peripheral blood, % ringed sideroblasts in the bone marrow.
23. Which of the following is associated with a good prognosis in AA?
 - a. Karyotype with monosomy 7
 - b. Cytopenia after immunosuppression
 - c. Young age and available HLA-identical sibling
 - d. Large GPI-negative clone in the peripheral blood
24. A theory that may explain the ability of a PNH clone to expand in AA is that it:
 - a. has a faster rate of growth.
 - b. is more resistant to chromosome damage.
 - c. responds more effectively to growth factors.
 - d. escapes immune attack by autoreactive T cells.
25. Which one of the following statements **IS** true?
 - a. AA and PNH are distinct diseases.
 - b. Both AA and PNH can progress to MDS.
 - c. Bone marrow failure is found exclusively in AA.
 - d. PNH clones may be found in AA, but not in MDS.

Continuing Education Registration Form

To earn continuing education (P.A.C.E.®) credit, (1) complete the form below, (2) record your answers, and (3) tear out and mail this form with a check or money order (\$18 for ASCLS members, \$28 for non-members for all articles) to:

American Society for Clinical Laboratory Science
P.O. Box 79154
Baltimore, MD 21279-0154

A certificate and credit will be awarded to participants who achieve a passing grade of 70% or better. Participants should allow eight weeks for notification of scores and receipt of certificates.

Focus: Bone Marrow Failure Anemias carries 3.0 hours of intermediate level credit. This form can be submitted for credit for up to one year from the date of issue.

Print or type carefully.

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Check all that apply

- I am an ASCLS member
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- I would like information on other continuing education sources

2. Specialty: (a) biochemistry/urinalysis (b) microbiology
(c) lab administration (d) hematology/hemostasis (e) education
(f) immunology (g) immunohematology

3. Workplace: (a) hospital over 500 beds (b) hospital 200–499
beds (c) hospital 100–199 beds (d) hospital under 100 beds
(e) private lab (f) community blood bank (g) group practice
(h) private physician (i) clinic (j) other

4. Salary range: (a) under \$10,000 (b) \$10,000 to \$20,000
(c) \$20,000 to \$30,000 (d) \$30,000 to \$40,000
(e) over \$40,000

Answers

Circle correct answer (questions are on previous two pages).

1. a b c d e 8. a b c d e 15. a b c d e 22. a b c d e
2. a b c d e 9. a b c d e 16. a b c d e 23. a b c d e
3. a b c d e 10. a b c d e 17. a b c d e 24. a b c d e
4. a b c d e 11. a b c d e 18. a b c d e 25. a b c d e
5. a b c d e 12. a b c d e 19. a b c d e 26. a b c d e
6. a b c d e 13. a b c d e 20. a b c d e 27. a b c d e
7. a b c d e 14. a b c d e 21. a b c d e 28. a b c d e

5. Did these articles achieve their stated objectives?
(a) yes (b) no

6. How much of these articles can you apply in practice?
(a) all (b) some (c) very little (d) none

7. Employment status: (a) full time (b) part time (c) student
(d) not employed (e) retired

Participant Information

Please circle the most appropriate answers.

1. Is this program used to meet your CE requirements for:
(a) state license (b) NCA (c) employment (d) other

8. How long did it take you to complete both the reading
and the quiz? _____ minutes

9. What subjects would you like to see addressed in future
Focus articles?

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